

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address	3b. Phone No. (include area code)	9. API Well No.
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area
		12. County or Parish
		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1. Well plat certified by a registered surveyor.</li> <li>2. A Drilling Plan.</li> <li>3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).</li> </ul> | <ul style="list-style-type: none"> <li>4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).</li> <li>5. Operator certification.</li> <li>6. Such other site specific information and/or plans as may be requested by the BLM.</li> </ul> |
|---|---|

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title		Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.  
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



## INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48( d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Connection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

## Additional Operator Remarks

### Location of Well

0. SHL: NWNE / 211 FNL / 1404 FEL / TWSP: 32N / RANGE: 07W / SECTION: 22 / LAT: 37.0091594 / LONG: -107.5917874 ( TVD: 0 feet, MD: 0 feet )  
PPP: NWSW / 1485 FSL / 721 FWL / TWSP: 32N / RANGE: 07W / SECTION: 14 / LAT: 37.0139373 / LONG: -107.5845202 ( TVD: 2933 feet, MD: 4684 feet )  
BHL: NESE / 1933 FSL / 708 FEL / TWSP: 32N / RANGE: 07W / SECTION: 14 / LAT: 37.0152056 / LONG: -107.5711682 ( TVD: 2893 feet, MD: 8428 feet )

### BLM Point of Contact

Name: ASHLEY C HITCHELL

Title: LIE

Phone: (970) 385-1304

Email: ahitchell@blm.gov

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**Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

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## Conditions of Approval - Surface

<b>Well Name:</b>	Southern Ute 701H Proposed Natural Gas Well
<b>Lease Number:</b>	14201516
<b>Location:</b>	Sections 15 & 22, T. 32 N., R. 7 W. La Plata County, Colorado
<b>Operator:</b>	Hilcorp Energy Company
<b>Application:</b>	Application for Permit to Drill (APD)

The following mitigation measures were derived from the Southern Ute 701H, 702H, 703H, & 705H Proposed Natural Gas Wells, Well Pads, and Pipelines EA (DOI-BLM-CO-S010-2017-0016-EA) and will be attached to the Applications for Permit to Drill as Conditions of Approval and only apply to the Federal action.

### **Air Quality**

1. The operator shall prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. Well pad and roads must be surfaced or dust inhibitors must be used (eg. surfacing materials, non-saline dust suppressants, water, etc.), as appropriate, on roads and wells locations constructed on soils susceptible to wind erosion to reduce the amount of fugitive dust generated by traffic of other activities.
2. During construction activities or heavy vehicle traffic during drilling and completion operations, the operator shall apply freshwater to travel paths/roads twice daily, unless soil conditions do not warrant water application or written approval is acquired for application of surfactants.
3. Vehicle speed shall not exceed 20 miles per hour on the access roads. No matter the speed of the vehicle, when travel on roads results in dust plumes that exceed the height of the vehicle, travel speeds shall be reduced.
4. Utilize green completions for the completion operations for the wells. If green completions is not feasible, route all natural gas produced during well completion to a combustion device. No natural gas produced during completions can be vented to the atmosphere.
5. All new and replacement internal combustion gas field engines must meet New Source Performance Standards (NSPS) (40 CFR 60, Subpart JJJJ). Additionally, all new and replacement internal combustion gas field engines greater than or equal to 500 design-rate horsepower (*or site de-rated horsepower values, as long as manufacturer de-ration values and emission factors are supplied and current demonstration compliant with appropriate emission rate requirement*) must not emit more than 1 gram of NO<sub>x</sub> per horsepower-hour.

6. All prime mover diesel drilling rig engines must meet Tier 2 (or better) emission standards.
7. Operator must comply with all applicable sections of New Source Performance Standards OOOO and OOOOa for gas well affected facilities during well completion activities.
8. An Oil and Gas Facility Air Quality Monitoring Annual Report must be submitted to the SUT Air Quality Program by April 1<sup>st</sup> of each year. The reporting form can be found on the SUT DOEs website at the following link: <https://www.suitdoe.com/wp-content/uploads/sites/9/2018/04/AirQualityReportForm1.pdf>

### **Federally Protected Species and Habitat**

9. To reduce the likelihood that migratory birds would be directly affected by construction activities, a qualified biologist must conduct a nesting bird survey for active and occupied nests within one week of tree/shrub clearing if site development would occur between March 1 and July 31. If an active nest is found, the vegetation would remain undisturbed and protected until the young fledge. At a minimum, protection would consist of a fence (plastic) placed a minimum of 50 feet from the nest to restrict human encroachment near the nest. No work would occur within the fence line. This minimum 50-foot buffer applies to all migratory birds protected under the Migratory Bird Treaty Act.
10. The operator must equip and maintain all open-vent exhaust stacks on production equipment to prevent birds from entering, and to discourage perching, roosting, and nesting. (Recommended enclosure structures on open-vent exhaust stacks are in the shape of a cone.)
11. The operator must install and maintain enclosure fencing for all open well cellars to prevent access to wildlife before and after drilling operations until the cellar is backfilled or covered/screened properly.
12. The operator must install and maintain a rigid screen over all open-topped tanks holding production fluid to prevent wildlife entry.
13. Interim reclamation of the well site and access road must occur as soon as possible.
14. Take appropriate measures to minimize the introduction of noxious or invasive weeds. Monitor and treat introduced noxious or invasive species.
15. Herbicide would be applied by a licensed applicator and the operator would ensure that application, storage, and disposal procedures meet Tribal and federal requirements.
16. All disturbed areas of soil must be reclaimed and revegetated with approved, certified weed free seed mixes, fertilizer, and/or mulch.

### **Noise**

17. Noise generated from the production equipment must be oriented in such a way to direct the least amount of noise toward nearby residents.

### **Visual Resources**

18. All permanent (lasting longer than 6 months), above-ground structures and any visible equipment should be painted a non-reflective Juniper Green color selected from the latest BLM environmental color chart that best allows the facility to blend into the background.

The color shall be maintained throughout the life of the well/facilities. Areas required to be painted a different color to comply with the Occupational Safety and Health Act (OSHA) are excluded.

19. (Drilling) The operator must request the drilling contractor to provide lighting that would not illuminate areas beyond those areas necessary for safe operations and operator/contractors should avoid directing light toward sensitive receptors (eg. residential buildings, etc.). (Production) All permanent (lasting more than 6 months) lighting, if installed on the well location, shall be hooded and directed downward toward the area needing illumination. The lighting must be turned off when personnel are not onsite or when the light is no longer in use.
20. Above-ground storage tanks and separators shall be no higher than 12 feet tall.
21. If a pumpjack is installed, the long edge of the pump-jack must be oriented on a northeast-southwest axis.

### **Soils/Vegetation**

22. Construction/reclamation operations will not take place during periods of time when the soil is frozen or too wet to adequately support equipment. Operations will stop when equipment creates ruts greater than 3-4 inches deep to reduce compaction and soil mixing.
23. All stockpiled topsoil for the well pad shall be completely segregated from other subsoils or fill material to avoid soil mixing.
24. Interim reclamation of the well sites and access roads must occur as soon as possible.
25. Erosion shall be monitored by the operator and corrected when features such as gullying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are observed.
26. The operator must utilize storm water management actions to ensure disturbed areas are quickly stabilized to control surface water flow and to protect both the disturbed and adjacent areas from erosion and siltation. This may involve construction and maintenance of wattles, berms, ditches, mulching, rock rundowns, etc. Cut and fill slopes during construction and interim reclamation shall be protected against erosion with the use of contouring, swales, water bars, lateral furrows, pocking/pitting of the soil surface, or other measures approved by the authorized officer.
27. If necessary, biodegradable matting, bales, or wattles of weed-free straw or weed-free native grass hay shall be used on cut and fill slopes and along drainages to protect against soil erosion. Additional BMPs shall be employed as necessary to reduce erosion and offsite transport of sediment.
28. Spills must be reported to the BLM and SUIT-DOE. Soils impacted by spills must be remediated or removed with approval from the BLM and SUIT.

### **Water Resources – Ground Water**

29. The operator shall install storage tanks with a secondary containment structure of sufficient capacity to contain at least 110% of the storage capacity of the largest storage tank. The operator shall prevent livestock from entering the secondary containment area by installing an enclosure fence.

30. Chemical containers shall be clearly labeled, maintained in good condition, and placed within a secondary containment structure. Small secondary containment basins must be screened to prevent wildlife entry.
31. Below-grade tanks must be equipped with an appropriate leak detection system. The walls and floors must be double-walled if the tank comes into contact with soil.
32. In the event that domestic ground water well degradation is caused by a gas well, the gas well must be remediated or other action taken as determined by the appropriate agency.

### **Water Resources – Surface Water**

33. An appropriately sized culvert shall be installed under the access road to prevent water impoundment. The culvert shall be no less than 18 inches in diameter. The depth of material cover over the culvert shall be no less than 12 inches or one half the diameter of the culvert, whichever is greater. Culvert inlets and outlets shall be installed at the grade of the surface and incorporate energy dissipation treatments. Culverts shall be installed and maintained to BLM Gold Book standards.

### **Invasive Species and Noxious Weeds**

34. The operator must control the introduction of noxious and invasive species to the proposed action by ensuring that construction vehicles arriving to the site are clean and free of imported soil or visible seeds.
35. The operator must control and treat Colorado state listed noxious species present on and immediately adjacent to the well site and access road. Invasive species must be controlled to a level consistent with immediately surrounding populations.

The operator must use native, noninvasive plant seeds approved by the SUIT for reestablishing vegetation communities.

# NOTICE TO OPERATORS

All Spud notifications must be given to BLM personnel directly. **Do not leave messages on answering machines.** Spud notices are to be phoned into the BLM office during regular working hours (Monday-Friday, 8:00-4:30).

If any operations are to start over the weekend or holiday, notify this office by **noon** Friday or the day prior to the holiday. If any problems arise after hours or on weekends, call BLM personnel using the home phone numbers listed below. **Do not leave messages on answering machines.**

Rodney Brashear	Lead Technician	work: 970-385-1347	cell: 970-799-1244
Alan White	Technician	work: 970-385-1201	cell: 970-317-0329
Nathan Willis	Technician	work: 970-385-1349	cell: 970-749-1734
Bryan Clappe	Technician	work: 970-385-1364	cell: 970-903-9077
Joe Killins	Petroleum Engineer	work: 970-385-1363	cell: 970-759-8988

## PLEASE NOTE:

1. Approved for a period not to exceed 2 years.
2. Approval of this agreement does not warrant or certify that the operator thereof and other holders of operating rights hold legal or equitable title to those rights in the subject lease which are committed hereto.
3. See Site Specific Conditions of Approval.

## **INFORMATIONAL NOTICE - APDs**

### **Tres Rios Field Office**

This notice is an abstract of some major regulations and Onshore Orders and includes notification requirements and information.

1. Drilling Operations (Onshore Order No. 2)
  - a. If DSTs are run, all applicable safety precautions outlined in Onshore Order No. 2 shall be observed.
  - b. All indications of usable water (10,000 ppm or less TDS) shall be reported to the Tres Rios Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
2. Well Abandonment (43 CFR 3162.3-4, Onshore Order No. 1-Sec.V)

Approval for abandonment shall be obtained prior to beginning plugging operations. Initial approval for plugging operations may be verbal, but shall be followed-up in writing within 30 days. Subsequent and final abandonment notifications are required and shall be submitted on Sundry Notice (Form 3160-5), in triplicate.

3. Reports and Notifications (43 CFR 3162.3-2, 3162.4-1, 3162.4-3, 00-6)
  - a. Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions or data obtained and compiled during the drilling, work over, and/or completion operations shall be filed with a Completion Report (Form 3160-4), in triplicate. Submit casing/cementing reports and other subsequent reports via Sundry Notice, Form 3160-5.
  - b. In accordance with 43 CFR 3162.4-3, this well shall be reported on BLM Form 3160-6, Monthly Report of Operations, starting with the month in which drilling operations commence, and continuing each month until the well is physically plugged and abandoned.
  - c. Notify this office within 5 business days of production start-up if either of the following two conditions occur:
    - (1) The well is placed on production, or
    - (2) The well resumes production after being off production for more than 90 days.

Placed on production means shipment or sales of hydrocarbons from temporary tanks, production into permanent facilities or measurement through permanent facilities. Notification may be written or verbal with written follow-up within 15 days.

- d. As per Onshore Order No. 6, III.A.2.b., if hydrogen sulfide is present the operator shall initially test the H<sub>2</sub>S concentration of the gas stream for each well or production facility. Submit the results of this test within 30 days of filing Form 3160-4, Well Completion or Recompletion Report and Log.
4. Environmental obligations and disposition of production (00-7, NTL-3A, 43 CFR 3162.5-1, 3162.7 and 40 CFR 302-4)

If underground injection is proposed, an EPA or State UIC permit shall also be required and submitted to this office.

  - a. Spills, accidents, fires, injuries, blowout and other undesirable events shall be reported to this office within the time frames in NTL-3A.

- b. Venting and flaring of gas during drilling, completion, initial production testing, subsequent well operations and emergencies are governed by 43CFR 3179.1
- c. Off-lease measurement and commingling of production must be approved by the authorized officer.

5. Well Identification (43 CFR 3162.6)

Each drilling, producing or abandoned well on Tribal Or Federal lands shall be identified as follows. All signs will be legible and in a conspicuous place.

Drilling wells shall have items 1-4

Producing and abandon wells shall have items 1-6

The well sign for the reference well must include:

1. Name of the operator
2. API Number
3. SL (surface location – QtrQtr), Township and Range
4. SL lease number
5. BHL (bottom hole location Qtr Qtr-end of lateral if appropriate), Township and Range
6. BHL lease number or Communitization Agreement Number (if applicable) and whether lease is Tribal or Allotted.

6. Bureau of Land Management, Tres Rios Field Office Address and Contacts:

ADDRESS: Public Lands Center  
161 Burnett Drive Unit 4  
Durango, Colorado 81301

BUSINESS HOURS: 7:45 A.M. to 4:30 P.M. (Mountain Time), Monday-Friday

AFTER HOURS:

Rodney Brashear	Lead Petroleum Engineering Technician Home: (970) 588-3699      Cell: (970) 799-1244
Alan White	Petroleum Engineering Technician Home:                              Cell: (970) 317-0329
Nathan Willis	Petroleum Engineering Technician Home:                              Cell: (970) 749-1734
Bryan Clappe	Petroleum Engineering Technician Cell: (970) 903-9077



# United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
Tres Rios Field Office  
161 Burnett Drive - Unit 4  
Durango, CO 81301-3647

In Reply Refer To:

COA APD ID: 10400091340

HILCORP ENERGY COMPANY  
SOUTHERN UTE 701H

## GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

### I. GENERAL

- A. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a notice of intent (on a Sundry Notice, Form 3160-5) within three business days (original and three copies of Federal leases and an original and four copies on Indian leases). **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours via Sundry Notice. Emergency program changes after hours should be directed to Joe Killins at (970) 759-8988.**
- B. Notify this office at least 24 hours in advance prior to the following:
- a. Well Spud
  - b. Running and cementing casing
    - i. Submit a cement evaluation log if cement is not circulated to surface.
  - c. BOP test
    - i. In the event a BLM inspector is not present during the initial BOP test, please provide chart record.
- C. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).
- D. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way. All operations will be governed by Onshore Order #2 unless specifically modified prior to operations.

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INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

**E.** From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall always maintain rig surveillance, unless the well is secured with blowout preventers or cement plugs.

**F.** On directional/horizontal wells submit as drilled directional survey from surface to total depth.

**II. Site Specific**

**III. PHONE NUMBERS**

<b>Rodney Brasher</b>	<b>Lead Technician</b>	<b>work: 970-385-1347</b>	<b>cell: 970-799-1244</b>
<b>Alan White</b>	<b>Technician</b>	<b>work: 970-385-1201</b>	<b>cell: 970-317-0329</b>
<b>Nathan Willis</b>	<b>Technician</b>	<b>work: 970-385-1349</b>	<b>cell: 970-749-1734</b>
<b>Bryan Clappe</b>	<b>Technician</b>	<b>work: 970-385-1364</b>	<b>cell: 970-903-9077</b>
<b>Joe Killins</b>	<b>Engineer</b>	<b>work: 970-385-1363</b>	<b>cell: 970-759-8988</b>



## Operator

*I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.*

**NAME:** AMANDA WALKER

**Signed on:** 04/18/2023

**Title:** Operations/Regulatory Technician

**Street Address:** 1111 TRAVIS ST

**City:** HOUSTON

**State:** TX

**Zip:** 77002

**Phone:** (346)237-2177

**Email address:** MWALKER@HILCORP.COM

## Field

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**

APD ID: 10400091340

Submission Date: 04/18/2023

Highlighted data reflects the most recent changes  
[Show Final Text](#)

Operator Name: HILCORP ENERGY COMPANY

Well Name: SOUTHERN UTE

Well Number: 701H

Well Type: COALBED NATURAL GAS WELL

Well Work Type: Drill

## Section 1 - General

APD ID: 10400091340

Tie to previous NOS? N

Submission Date: 04/18/2023

BLM Office: Durango

User: AMANDA WALKER

Title: Operations/Regulatory Technician

Federal/Indian APD: IND

Is the first lease penetrated for production Federal or Indian? IND

Lease number: 14201516

Lease Acres: 2168

Surface access agreement in place? N

Allotted? N

Reservation: SOUTHERN UTE

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO

APD Operator: HILCORP ENERGY COMPANY

Operator letter of

## Operator Info

Operator Organization Name: HILCORP ENERGY COMPANY

Operator Address: 382 ROAD 3100

Zip: 87410

Operator PO Box:

Operator City: AZTEC

State: NM

Operator Phone: (999)999-9999

Operator Internet Address:

## Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: SOUTHERN UTE

Well Number: 701H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: IGNACIO BLANCO Pool Name: FRUITLAND COAL

Operator Name: HILCORP ENERGY COMPANY

Well Name: SOUTHERN UTE

Well Number: 701H

Is the proposed well in an area containing other mineral resources? NATURAL GAS

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: SINGLE WELL

Multiple Well Pad Name:

Number:

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: COALBED NATURAL GAS WELL

Describe Well Type:

Well sub-Type: OTHER

Describe sub-type:

Distance to town:

Distance to nearest well: 1568 FT

Distance to lease line: 253 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: SHEET\_A2\_20230417122332.pdf

SHEET\_A1\_20230417122333.pdf

SHEET\_C\_20230418131725.pdf

Well work start Date: 07/31/2023

Duration: 45 DAYS

### Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number: 0038275

Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	211	FNL	1404	FEL	32N	07W	22	Aliquot NWNE	37.0091594	-107.5917874	LA PLATA	COL ORADO	NEW MEXICO	F	FEE	6295	0	0	N
KOP Leg #1	211	FNL	1404	FEL	32N	07W	22	Aliquot NWNE	37.0091594	-107.5917874	LA PLATA	COL ORADO	NEW MEXICO	F	FEE	5589	706	706	N

**Operator Name:** HILCORP ENERGY COMPANY

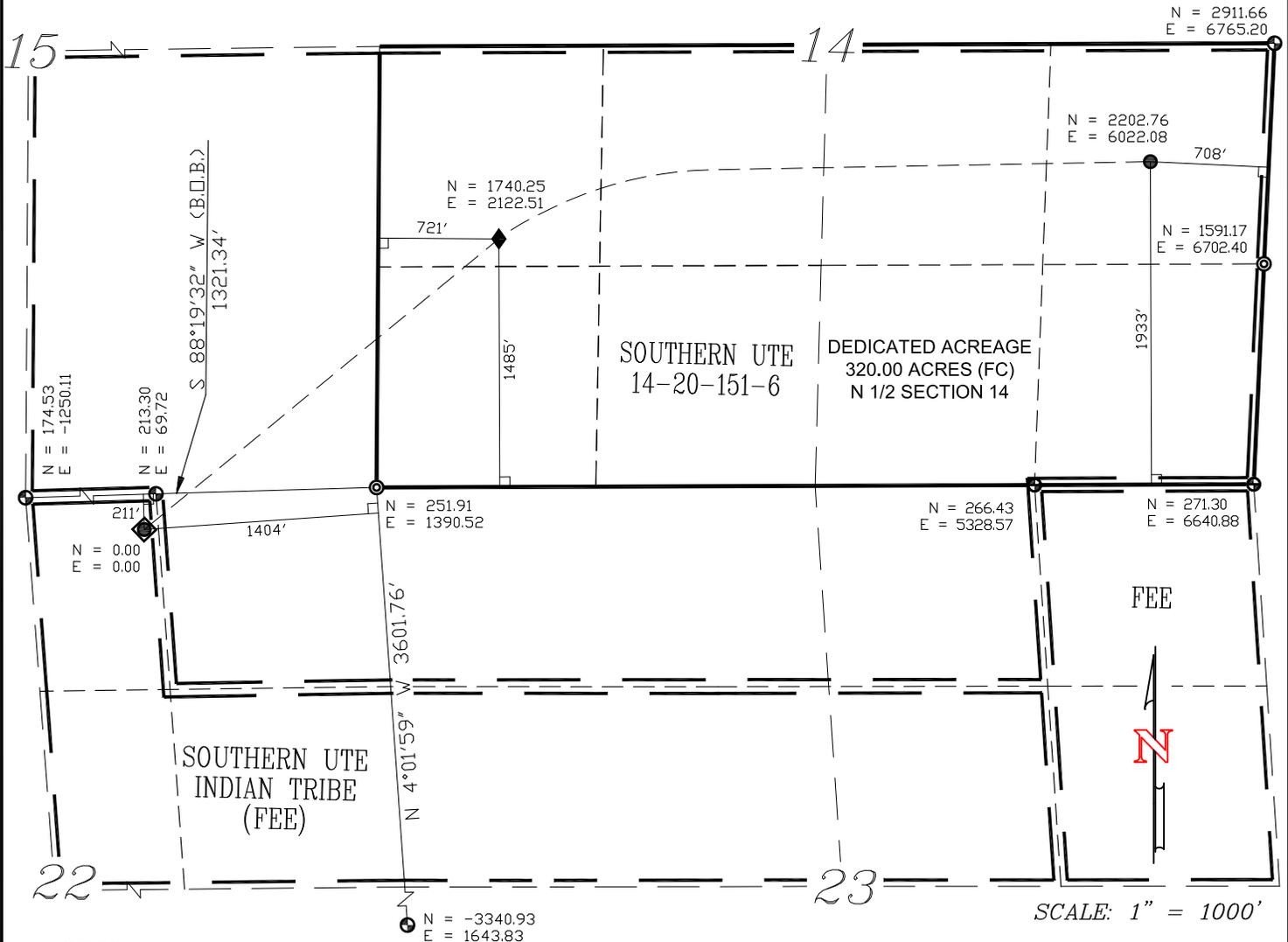
**Well Name:** SOUTHERN UTE

**Well Number:** 701H

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
PPP Leg #1-1	1485	FSL	721	FWL	32N	07W	14	Aliquot NWSW	37.0139373	-107.5845202	LA PLATA	COLORADO	NEW MEXICO	I	14201516	3362	4684	2933	Y
EXIT Leg #1	1933	FSL	708	FEL	32N	07W	14	Aliquot NESE	37.0152056	-107.5711682	LA PLATA	COLORADO	NEW MEXICO	I	14201516	3402	8428	2893	Y
BHL Leg #1	1933	FSL	708	FEL	32N	07W	14	Aliquot NESE	37.0152056	-107.5711682	LA PLATA	COLORADO	NEW MEXICO	I	14201516	3402	8428	2893	Y

# HILCORP SAN JUAN, L.P.

SOUTHERN UTE 701H - 211' FNL & 1404' FEL (SURFACE) IN SECTION 22,  
 1933' FSL & 708' FEL (LATERAL No. 1 BOTTOM HOLE) IN SECTION 14,  
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO  
 GROUND ELEVATION: 6295'



### NOTES

1. SURFACE BEARINGS AND DISTANCES SHOWN.
2. NORTHING & EASTING COORDINATES ARE REFERENCED TO LOCALIZED SYSTEM WITH THE SURFACE LOCATION DEFINED AS THE ORIGIN. BASED ON GPS OBSERVATIONS.
3. BEARING AND DISTANCES SHOWN ARE BASED ON GPS OBSERVATIONS WITH A LOCALIZED TRANSVERSE MERCATOR PROJECTION. PROJECTED TO GROUND COORDINATES WITH THE ORIGIN AT THE WELL FLAG LOCATION.

### BASIS OF BEARING

MONUMENTED SOUTH LINE OF THE SE 1/4 SE 1/4 OF  
 SEC. 15, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO  
 BEARS: S 88°19'32" W - 1321.34'



SCALE: 1" = 1000'

### LEGEND

- |                            |                            |                           |
|----------------------------|----------------------------|---------------------------|
| ◆ SURFACE LOCATION         | ↖ BREAK LINE               | (B.O.B.) BASIS OF BEARING |
| ● BOTTOM HOLE LOCATION     | ⊙ ALUMINUM CAP - SUIR 1992 | └ DENOTES 90° TIE         |
| ⊙ ALUMINUM CAP - SUIR 1991 | ○ CALCULATED POSITION      | ◆ FIRST TAKE POINT (FTP)  |

### GEO. SURFACE VALUES

LATITUDE (NAD 83)  
 NORTH 37.0091594°  
 LONGITUDE (NAD 83)  
 WEST 107.5917874°

HILCORP SAN JUAN, L.P.



P.O. BOX 3651  
 FARMINGTON, NM 87499  
 OFFICE: (505) 334-0408

SCALE: 1"=1000'

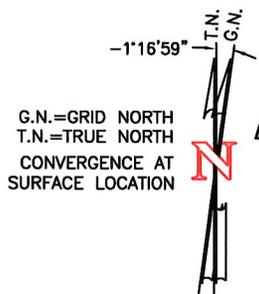
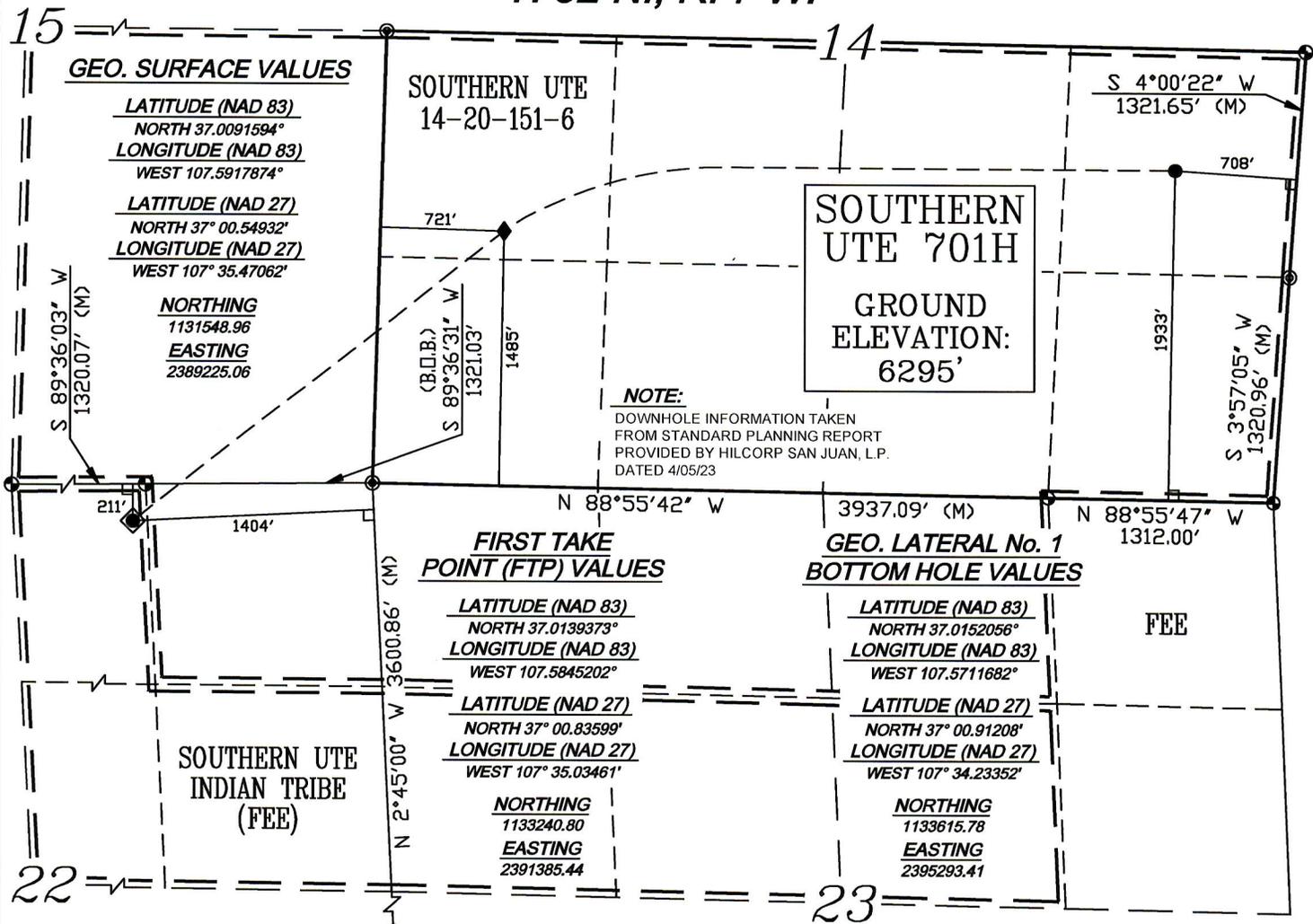
JOB No. 11732

DATE: 04/13/23

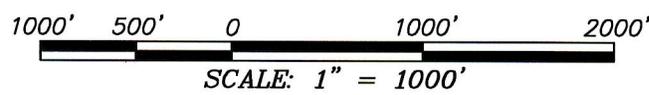
**DRILLING DIAGRAM FOR  
 HILCORP SAN JUAN, L.P.**  
**SURFACE: 211' F/NL & 1404' F/EL, SECTION 22,  
 LATERAL No. 1 BOTTOM HOLE: 1933' FSL & 708' FEL IN SEC. 14  
 T. 32 N, R. 7 W, N.M.P.M.  
 LA PLATA COUNTY, COLORADO**

BY: A SHEET A2

T. 32 N., R. 7 W.



**BASIS OF BEARING/DATUM**  
 CO SP SOUTH (1983) - NAVD 88 ELEV., GPS OBSERVATIONS:  
 MOUNMENTED SOUTH LINE OF THE SE 1/4 SE 1/4 OF SECTION 15,  
 BASIS OF ELEVATION: AS MEASURED AT SET OPUS ADJUSTED CONTROL POINT  
 LOCATED IN THE SW 1/4 OF SECTION 22, ELEVATION: 6257.4',  
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO



- LEGEND**
- ◆ SURFACE LOCATION
  - BOTTOM HOLE LOCATION
  - ◆ FIRST TAKE POINT (FTP)
  - ⊙ ALUMINUM CAP - SUIR 1991
  - ⊙ ALUMINUM CAP - SUIR 1992
  - CALCULATED POSITION
  - └ DENOTES 90° TIE
  - BREAK LINE
  - (M) MEASURED
  - (C) CALCULATED
  - (B.O.B.) BASIS OF BEARING

**SURVEYOR'S STATEMENT:**

I, John A. Vukonich, of Farmington, New Mexico, hereby state: This map was made from notes taken during an actual survey under my direct supervision on MARCH 20, 2023 and it correctly shows the location of SOUTHERN UTE 701H.

*John A. Vukonich*  
 COLORADO PLS No. 38215 PROFESSIONAL LAND SURVEYOR  
 DATE: 4/13/2023

**NOTES**

GPS OPERATOR GABE MARTINEZ OBSERVED A PDOP OF 1.9  
 ALL GPS OBSERVATIONS ARE IN COMPLIANCE WITH COGCC RULE NO. 215.

HILCORP SAN JUAN, L.P.

**PLAT OF DRILLING LOCATION FOR HILCORP SAN JUAN, L.P.**  
 SURFACE: 211' F/NL & 1404' F/EL, SECTION 22,  
 LATERAL No. 1 BOTTOM HOLE: 1933' FSL & 708' FEL IN SECTION 14  
 T. 32 N, R. 7 W, N.M.P.M.  
 LA PLATA COUNTY, COLORADO



P.O. BOX 3651  
 FARMINGTON, NM 87499  
 OFFICE: (505) 334-0408

SCALE: 1"=1000'    JOB No. 11732    DATE: 04/07/23

BY: C SHEET A1

**HILCORP SAN JUAN, L.P.**

**SOUTHERN UTE 701H**

**211' FNL & 1404' FEL (SURFACE) IN SECTION 22,  
1930' FSL & 710' FEL (BOTTOM HOLE) IN SECTION 14,**

**T-32-N, R-7-W, N.M.P.M.**

**LA PLATA COUNTY, COLORADO**

**LATITUDE: 37.0091594° N**

**LONGITUDE: 107.5917874° W**

**NAD 83**

FROM THE INTERSECTION OF COLORADO STATE HIGHWAY 172 AND  
COLORADO STATE HIGHWAY 151 IN IGNACIO, COLORADO.

TRAVEL SOUTHEASTERLY 9.7 MILES ON COLORADO STATE HIGHWAY 151.  
TURN RIGHT ONTO COUNTY ROAD 328 AND TRAVEL SOUTHERLY 0.5 MILE.  
TURN RIGHT ONTO COUNTY ROAD 321 AND TRAVEL WESTERLY 0.5 MILE.  
TURN LEFT ONTO COUNTY ROAD 326 AND TRAVEL SOUTHERLY 1.0 MILE.  
TURN RIGHT ONTO COUNTY ROAD 327 AND TRAVEL WESTERLY 1.3 MILES.

TURN RIGHT AT TEE IN ROAD AND TRAVEL NORTHERLY,  
THEN WESTERLY 0.6 MILE.

TURN RIGHT AT "Y" IN ROAD AND CONTINUE NORTHERLY,  
THEN WESTERLY 1.0 MILE, CROSSING CATTLE GUARD.

TURN LEFT AT "Y" IN ROAD AND TRAVEL SOUTHWESTERLY 1.4 MILES TO  
PROPOSED ACCESS ROAD TO THE LEFT AND SOUTHERN UTE 701H PROPOSED  
WELL LOCATION.

**APD ID:** 10400091340

**Submission Date:** 04/18/2023

Highlighted data reflects the most recent changes

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Well Type:** COALBED NATURAL GAS WELL

**Well Work Type:** Drill

[Show Final Text](#)

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
12310107	OJO ALAMO	6295	2355	3181	SANDSTONE	USEABLE WATER	N
12310108	KIRTLAND	3739	2556	3658	SHALE	NONE	N
12310109	FRUITLAND	3666	2629	3832	COAL	NATURAL GAS	Y
12310106	PICTURED CLIFFS	3280	3015	4750	SANDSTONE	NONE	N

## Section 2 - Blowout Prevention

**Pressure Rating (PSI):** 3M

**Rating Depth:** 5000

**Equipment:** Rotating head

**Requesting Variance?** NO

**Variance request:**

**Testing Procedure:** All required tests per regulations

**Choke Diagram Attachment:**

Pressure\_Control\_Equip\_20230418111752.pdf

**BOP Diagram Attachment:**

Pressure\_Control\_Equip\_writeup\_20230418111801.pdf

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

### Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	12.25	9.625	NEW	API	N	0	300	0	300	6295	5995	300	H-40	32.3	BUTT	18.1	15.8	DRY	37.7	DRY	26.2
2	INTERMEDIATE	8.75	7.0	NEW	API	N	0	4713	0	3000	6295	3295	4713	J-55	23	BUTT	4.1	2.9	DRY	3.4	DRY	2.9
3	PRODUCTION	6.25	4.5	NEW	API	N	4450	8428	2890	2893	3405	3402	3978	J-55	11.6	BUTT	1	1	DRY	1.9	DRY	1.7

#### Casing Attachments

**Casing ID:** 1      **String** SURFACE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

**Casing Design Assumptions and Worksheet(s):**

Casing\_Program\_20230418111827.pdf

Operator Name: HILCORP ENERGY COMPANY

Well Name: SOUTHERN UTE

Well Number: 701H

### Casing Attachments

Casing ID: 2 String INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing\_Program\_20230418111843.pdf

Casing ID: 3 String PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing\_Program\_20230418111859.pdf

### Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	300	151	1.25	15.2	188		Type III Cement	0.25% FL-52, 0.25 pps celloflake

INTERMEDIATE	Lead		0	4713	439	2.13	12.1	935		Premium Lite	3% CaCl, 0.25 pps celloflake, 5 ppm LCM-1, 0.4% FL-52, 8% bentonite
INTERMEDIATE	Tail		4213	4713	65	1.38	14.6	90		Type III Cement	1% CaCl, 0.25 pps celloflake, 0.2% FL-52

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	8428	0	0	0	0		Uncemented liner	N/A

### Section 5 - Circulating Medium

**Mud System Type:** Closed

**Will an air or gas system be Used?** YES

**Description of the equipment for the circulating system in accordance with Onshore Order #2:** Air assist will be used if returns are lost with drilling fluids.

**Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

Aerated\_Fluid\_Layout\_20230417132942.jpg

Drilling\_Fluids\_20230512131957.pdf

**Describe what will be on location to control well or mitigate other conditions:** 400 bbls of 10 lb mud in addition to standard

**Describe the mud monitoring system utilized:** Parson PVT or Equivalent

### Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	300	SPUD MUD	8.3	9.2							
300	4713	LSND/GEL	8.4	9.5							
4450	8428	LSND/GEL	8.5	10.5							

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

## Section 6 - Test, Logging, Coring

**List of production tests including testing procedures, equipment and safety measures:**

No production tests planned

**List of open and cased hole logs run in the well:**

MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGICAL LITHOLOGY LOG, GAMMA RAY LOG,

**Coring operation description for the well:**

No coring plans

## Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 900

**Anticipated Surface Pressure:** 254

**Anticipated Bottom Hole Temperature(F):** 140

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards**

**Hydrogen Sulfide drilling operations plan required?** NO

**Hydrogen sulfide drilling operations**

## Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Southern\_Ute\_701H\_Lateral\_No.1\_WP3\_Geographic\_Rep\_20230417134350.pdf

Southern\_Ute\_701H\_Pilot\_Hole\_WP3\_Geographic\_Rep\_20230417134350.pdf

Southern\_Ute\_701H\_Pilot\_Hole\_WP3\_Standard\_Plan\_Rep\_20230417134350.pdf

Southern\_Ute\_701H\_Lateral\_No.1\_WP3\_Spider\_Plot\_20230417134350.pdf

Southern\_Ute\_701H\_Lateral\_No.1\_WP3\_Anticollision\_20230417134350.pdf

Southern\_Ute\_701H\_Pilot\_Hole\_WP3\_Anticollision\_20230417134350.pdf

Southern\_Ute\_701H\_Lateral\_No.1\_WP3\_Plot\_20230417134350.pdf

Southern\_Ute\_701H\_Lateral\_No.1\_WP3\_Standard\_Plan\_Rep\_20230417134350.pdf

Southern\_Ute\_701H\_Pilot\_Hole\_WP3\_Plot\_20230417134350.pdf

Southern\_Ute\_701H\_Pilot\_Hole\_WP3\_Spider\_Plot\_20230417134350.pdf

OPE\_HZ\_Drill\_Wells\_WBD\_\_\_\_701H\_20230530083415.pdf

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

Testing\_Program\_20230417133858.pdf

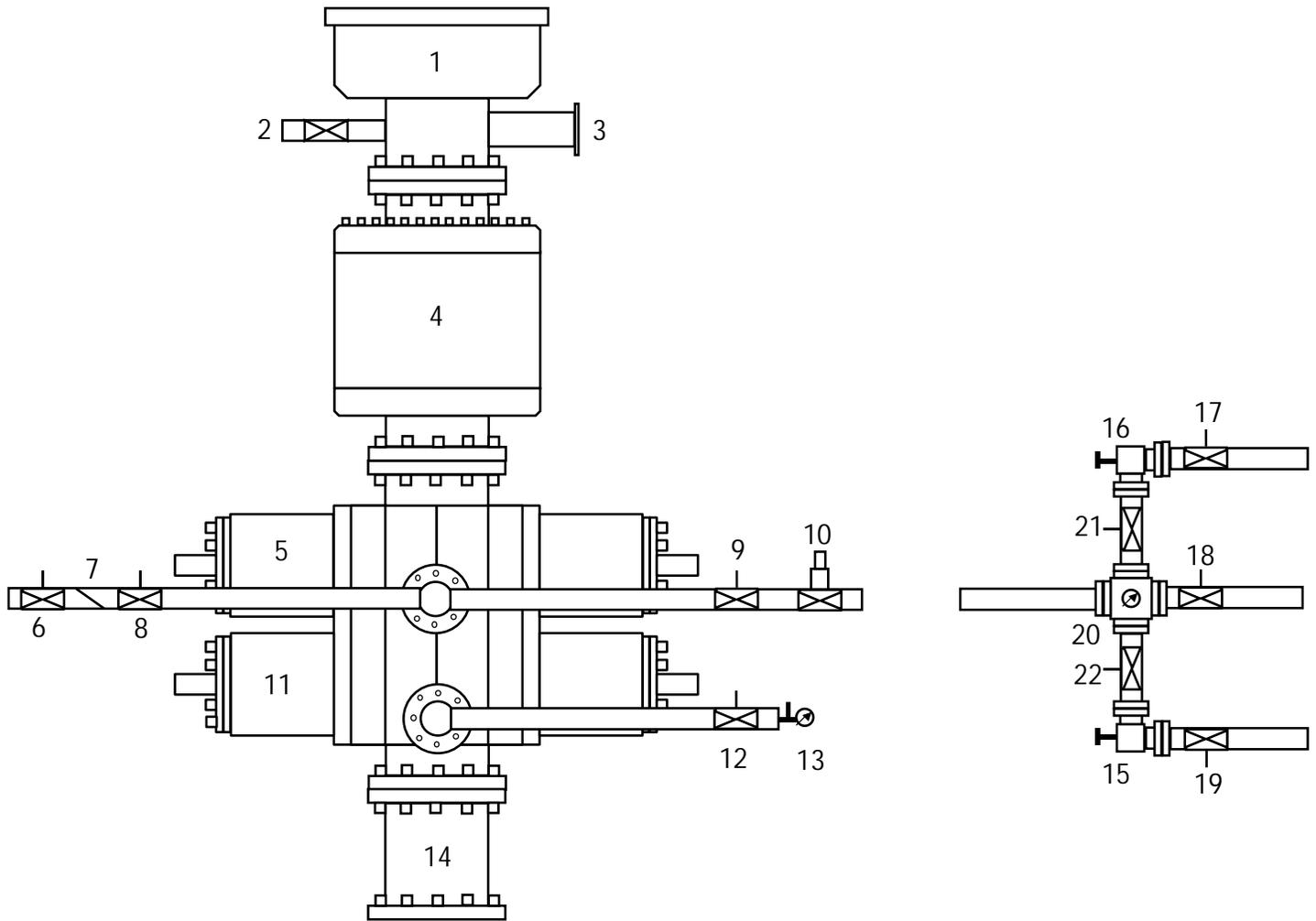
Cement\_Program\_20230418112928.pdf

**Other Variance attachment:**

CONFIDENTIAL

# Appendix A

## Pressure Control Equipment Configuration



1	Rotating Head	12	Manual Isolation Valve
2	Flow Line	13	Needle Valve & Pressure Gauge
3	Fill-Up Line	14	Spacer Spool (if needed)
4	3M Annular Preventer	15	Manual Choke
5	3M Pipe Rams	16	Manual Choke
6	Manual Isolation Valve	17	Manual Isolation Valve
7	Check Valve	18	Manual Isolation Valve
8	Manual Isolation Valve	19	Manual Isolation Valve
9	Manual Isolation Valve	20	Valve Block & Pressure Gauge
10	High Closing Ratio Valve	21	Manual Isolation Valve
11	3M Blind Rams	22	Manual Isolation Valve

## Technical Drilling Plan (Rev. 04)

Hilcorp Energy Company proposes to drill and complete the referenced horizontal well targeting a coal seam in the Fruitland formation.

Note: This technical drilling plan will be adjusted based upon actual conditions.

### 1. Location

Date:	April 18, 2023	Pool:	Fruitland Coal
Well Name:	Southern Ute 701H	Ground Elevation (ft. MSL):	6,295'
Surface Hole Location:	37.009155° N, 107.591177° W	Total Measured Depth (ft.)	8,428'
Bottom Hole Location:	37.015° N, 107.571° W	County, State:	La Plata County, CO

Note: All depths in the directional drilling plan are referenced from an estimated RKB datum of 15' above ground level.

### 2. Geological Markers

Anticipated formation tops with comments of any possible water, gas or oil shows are indicated below:

Formation	Depth (ft. TVD)	Remarks
Ojo Alamo	2,355'	Water (fresh/useable)
Kirtland	2,556'	None
Fruitland	2,629'	Gas, Coal, Water
Pictured Cliffs	3,015'	None

### 3. Pressure Control Equipment

See attached BOP equipment and choke manifold schematics for a diagram of pressure control equipment.

- BOP equipment will be nipped up on top of the wellhead after surface casing is set and cemented.
- Pressure control configurations will be designed to meet the minimum 2M standards.
- All equipment will have a minimum of 3M pressure rating and will be rated for 5,000' (TVD).
- A rotating head will be installed on top of the annular as seen in the attached diagram.

4. Casing & Cement Program

A. Proposed Casing Program:

Proposed Casing Design						
Casing String	Hole Size	Casing Size	Weight/Grade	Top Depth (MD/TVD)	Shoe Depth (MD/TVD)	
Surface	12-1/4"	9-5/8"	32.3# H40 (or equiv.) STC	0'	300' / 300'	
Intermediate	8-3/4"	7"	23# J55 (or equiv.) LTC	0'	4,713' / 3,000'	
Production Liner (pre-perforated)	6-1/4"	4-1/2"	11.6# J55 (or equiv.) LTC	4,450' / 2,890'	8,428' / 2,893'	
Proposed Casing Design Safety Factors						
Casing String	Casing Description		Burst Design SF	Collapse Design SF	Joint Tensile Design SF	Connection Tensile Design SF
Surface	9-5/8" 32.3# H40 STC		15.8	18.1	37.7	26.2
Intermediate	7" 23# J55 LTC		2.9	4.1	3.4	2.9
Production Liner (pre-perforated)	4-1/2" 11.6# J55 LTC		N/A	N/A	1.9	1.7

Notes:

- The production liner will be pre-perforated and dropped off in the open hole (uncemented). The top of the production liner will be approximately 5'-10' outside of the casing exit (no overlap between liner and 7" casing).
- If the 6-1/4" hole is not drilled to the total planned measured depth, the production liner setting depth and length will be adjusted accordingly.
- The 7" casing will be set across the setback boundary line and with the casing shoe within the drill block.

B. Proposed Centralizer Program:

Proposed Centralizer Program	
Interval	Centralizers & Placement
Surface	1 centralizer per joint on bottom 3 joints.
Intermediate	1 centralizer 10' above the shoe with lock collar. 1 centralizer every other joint on bottom 10 joints. 1 centralizer every 4 <sup>th</sup> joint to Ojo Alamo base. 1 Turbolizer at base of Ojo Alamo. 1 centralizer every joint to Ojo Alamo top. 1 Turbolizer placed midway through Ojo Alamo. 1 centralizer every 4 <sup>th</sup> joint from top of Ojo Alamo to surface shoe. 1 centralizer inside the surface casing.
Production	N/A

5. Drilling Fluids Program

A. Proposed Drilling Fluids Program:

Proposed Drilling Fluids Program					
Interval	Fluid Type	Density (ppg)	Fluid Loss (mL/30 min)	Max Chlorides (mg/L)	Depth (ft. MD)
Surface	Spud Mud	8.3 – 9.2	NC	1,000	0' – 300'
Intermediate	LSND / Gel System	8.4 – 9.5	6-16	1,000	300' – 4,713'
Production	LSND Brine (if needed)	8.5 – 10.5	4-14	1,000 400,000 (if CaCl added for density)	4,450' – 8,428'

Notes:

- In the 6-1/4" production section, CaCl brine will only be utilized if a weighting agent is needed to increase mud weight (for either well control or wellbore stability).
- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 605 bbls (3,396 ft<sup>3</sup>).

6. Estimated Pressures & Drilling Hazards

A. Estimated Pressures

- Estimated Reservoir Pressure of Fruitland Coal: 600 – 900 psi
- No over-pressured intervals expected.
- There is production from the Fruitland Coal formation in offset wells in the area, which could result in these formations being under-pressured.

B. Water Flows

- Water flows are possible in the intermediate section. Water flows will be mitigated with increased mud weight.

C. Lost Circulation

- Lost circulation is possible in the coal section. Losses will be mitigated by adding LCM to the mud system.

D. Hydrogen Sulfide

- No hydrogen sulfide is expected to be encountered based on nearby well production.

# SOUTHERN UTE 701H

PROPOSED LATERAL WBD  
DRAWING NOT TO SCALE

State: CO  
County: La Plata  
API:  
GL: 6295'  
KB: 15'

12-1/4" Surface Hole to 300' MD  
9-5/8" 32.3# H40 ST&C set at 300' MD  
Cement to surface

6-1/4" Hole TD @ 8431'  
4-1/2" 11.6# J55 LT&C set at 8431' MD/2893' TVD  
Pre-Perforated Drop-off liner

KOP Lateral #1 @ 4436'

Lateral 1

8-3/4" Hole TD @ 4691' MD  
7" 23# J55 LT&C set at 4691' MD/3000' TVD  
Cement to surface

Formation	MD	TVD
OJO	3159'	2355'
KIRTLAND	3636'	2556'
FRUITLAND	3810'	2629'
PC (EST)	4726'	3015'

Bore Name	Window Top	Window Bot	Bridge Plug	KOP Method	KOP (MD)	KOP (TVD)	Top of Production T-32-N R-7-W	Top of KOP T-32-N R-7-W	Total Depth MD	Total Depth TVD	Liner Bot	Liner Top	Proposed BHL T-32-N R-7-W
Pilot	N/A	N/A	N/A	Motor	706	706	211' FNL & 1404' FEL (22)	211' FNL & 1404' FEL (22)	4713	3000	N/A	N/A	1644' FSL & 916' FWL (14)
Lateral 1	4426	4436	4436	Whipstock	4436	2883	211' FNL & 1404' FEL (22)	1479' FSL & 724' FWL (14)	8428	2893	8428	4440	1930' FSL & 710' FEL (14)

## 7. Testing, Logging, Coring

### A. Mud Logging

- Mud loggers will collect formation samples every 30' from the surface casing shoe to both the TD of the pilot hole and TD of the production hole.

### B. MWD

- Measurement while drilling tools will be utilized from the surface casing shoe to both the TD of the pilot hole and TD of the production hole to measure and record inclination and azimuth.

### C. LWD

- Logging while drilling tools (gamma ray) will be utilized in the intermediate section from the surface casing shoe to the pilot hole section TD.
- Logging while drilling tools (gamma ray) will be utilized while drilling the production section from the intermediate casing kick-off to the production hole section TD to assist in staying in the desired coal seam while drilling the lateral section.

### D. Open Hole Logging

- There are no planned open hole logs post drilling.

### E. Coring

- There is no coring or formation testing planned.

### F. Cased Hole Logging

- The 7" intermediate casing will be cemented to surface to protect water bearing zones. If cement is not circulated to surface on the intermediate cement job, a temperature survey or a cement bod log will be run to verify top of cement.

## 8. Directional Drilling Plan

- The directional drilling plan and plot are attached.
- The directional plan is built from geologic targets from offset wells and lease boundaries. The production hole section will be landed and drilled horizontally within the target formation utilizing LWD tools to steer the wellbore. On-site adjustments to the directional plan will be made and formation and wellbore dictate.

C. Proposed Cement Program:

Proposed Cement Design							
Interval	Depth (ft. MD)	Lead/Tail	Volume (ft <sup>3</sup> )	Sacks	Slurry	Density	Planned TOC
Surface	300'	Lead	188 ft <sup>3</sup>	151	Type III Cement 0.25% FL-52, 0.25 pps celloflake 1.25 ft <sup>3</sup> /sk – 5.75 gal/sk	15.2 ppg	Surface
Intermediate	4,713'	Lead	935 ft <sup>3</sup>	439	Premium Lite 3% CaCl, 0.25 pps celloflake, 5 ppm LCM-1, 0.4% FL-52, 8% bentonite, 0.4% SMS 2.13 ft <sup>3</sup> /sk – 11.29 gal/sk	12.1 ppg	Surface
		Tail	90 ft <sup>3</sup>	65	Type III Cement 1% CaCl, 0.25 pps celloflake, 0.2% FL-52 1.38ft <sup>3</sup> /sk – 6.64 gal/sk	14.6 ppg	4,213'
Production	8,428'	N/A	N/A	N/A	N/A – Uncemented pre-perforated liner.	N/A	N/A

Notes:

- The cement slurry additives may be adjusted to accommodate required pump and compressive test times.
- For the intermediate hole section, a 2-stage cement job may be performed if hole conditions dictate. If needed, the stage tool will be placed at an approximate depth near the top of the Fruitland Coal (2,629' TVD)
- Cement will be circulated to surface on surface and intermediate casing sections to protect water bearing zones.
- A minimum of 8 hours of wait on cement time will be observed on each hole section to allow adequate time for cement to achieve a minimum of 500 psi of compressive strength. The BOP will not be nipped down, the wellhead will not be installed, the casing will not be tested and the prior casing shoe will not be drilled out until adequate wait on cement time has been observed (8 hours or time to reach 500 psi compressive strength).

APD ID: 10400091340

Submission Date: 04/18/2023

Highlighted data  
reflects the most  
recent changes

Operator Name: HILCORP ENERGY COMPANY

Well Name: SOUTHERN UTE

Well Number: 701H

[Show Final Text](#)

Well Type: COALBED NATURAL GAS WELL

Well Work Type: Drill

## Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

SHEET\_B1\_20230418113226.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

**Existing Road Improvement Description:** A total of 6786 of existing roadway will be upgraded by adding 3 minus road base after twelve new culverts are installed at the locations indicated on Sheet J

**Existing Road Improvement Attachment:**

SHEET\_J\_20230418113358.pdf

## Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

SHEET\_B3\_20230418113730.pdf

New road type: RESOURCE

Length: 671 Feet

Width (ft.): 30

Max slope (%): 8

Max grade (%): 8

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: crowning and capping

New road access plan or profile prepared? Y

New road access plan

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

SHEET\_B2\_20230418115057.pdf

**Access road engineering design?** N

**Access road engineering design**

**Turnout?** N

**Access surfacing type:** GRAVEL

**Access topsoil source:** ONSITE

**Access surfacing type description:**

**Access onsite topsoil source depth:** 6

**Offsite topsoil source description:**

**Onsite topsoil removal process:** Dozer

**Access other construction information:**

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

### Drainage Control

**New road drainage crossing:** CULVERT

**Drainage Control comments:** There will be two 24 x 30 culverts and one cattleguard on the new access road per onsite dated 3/28/2023

**Road Drainage Control Structures (DCS) description:** crowning and capping

**Road Drainage Control Structures (DCS) attachment:**

Appendix\_B\_20230418114853.pdf

### Access Additional Attachments

### Section 3 - Location of Existing Wells

**Existing Wells Map?** YES

**Attach Well map:**

SHEET\_D1\_20230418115601.pdf

SHEET\_D2\_20230418115601.pdf

### Section 4 - Location of Existing and/or Proposed Production Facilities

**Submit or defer a Proposed Production Facilities plan?** DEFER

**Estimated Production Facilities description:** . The typical well producing into this formation has the following production facilities. i. Two 80 BBL Produced Water Tanks ii. Separator iii. Production pit iv. Pumping unit v. Meter House vi. Compressor

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

## Section 5 - Location and Types of Water Supply

### Water Source Table

**Water source type:** FRESH WATER LAKE

**Water source use type:** DUST CONTROL  
INTERMEDIATE/PRODUCTION  
CASING

**Source latitude:** **Source longitude:**

**Source datum:**

**Water source permit type:** OTHER

**Water source transport method:** TRUCKING

**Source land ownership:** OTHER **Describe land ownership:** Private and Commercial

**Source transportation land ownership:** PRIVATE

**Water source volume (barrels):** 2000

**Source volume (acre-feet):** 0.25778619

**Source volume (gal):** 84000

### Water source and transportation

SHEET\_H\_20230418121058.pdf

**Water source comments:**

**New water well?** N

### New Water Well Info

**Well latitude:** **Well Longitude:** **Well datum:**

**Well target aquifer:**

**Est. depth to top of aquifer(ft):** **Est thickness of aquifer:**

**Aquifer comments:**

**Aquifer documentation:**

**Well depth (ft):** **Well casing type:**

**Well casing outside diameter (in.):** **Well casing inside diameter (in.):**

**New water well casing?** **Used casing source:**

**Drilling method:** **Drill material:**

**Grout material:** **Grout depth:**

**Casing length (ft.):** **Casing top depth (ft.):**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Well Production type:**

**Completion Method:**

**Water well additional information:**

**State appropriation permit:**

**Additional information attachment:**

### Section 6 - Construction Materials

**Using any construction materials:** YES

**Construction Materials description:** Construction material will be obtained from the location site

**Construction Materials source location**

SHEET\_G1\_20230418121804.pdf

SHEET\_G2\_20230418121804.pdf

### Section 7 - Methods for Handling

**Waste type:** DRILLING

**Waste content description:** Formation cuttings

**Amount of waste:** 605 barrels

**Waste disposal frequency :** Daily

**Safe containment description:** Roll-off bins

**Safe containmant attachment:**

**Waste disposal type:** HAUL TO COMMERCIAL FACILITY      **Disposal location ownership:** OTHER

**Disposal type description:**

**Disposal location description:** Bondad Landfill, Envirotech Land Farm

### Reserve Pit

**Reserve Pit being used?** NO

**Temporary disposal of produced water into reserve pit?** NO

**Reserve pit length (ft.)**                      **Reserve pit width (ft.)**

**Reserve pit depth (ft.)**    **Reserve pit volume (cu. yd.)**

**Is at least 50% of the reserve pit in cut?**

**Reserve pit liner**

**Reserve pit liner specifications and installation description**

### Cuttings Area

**Cuttings Area being used?** NO

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Are you storing cuttings on location?** N

**Description of cuttings location**

**Cuttings area length (ft.)**

**Cuttings area width (ft.)**

**Cuttings area depth (ft.)**

**Cuttings area volume (cu. yd.)**

**Is at least 50% of the cuttings area in cut?**

**WCuttings area liner**

**Cuttings area liner specifications and installation description**

## Section 8 - Ancillary

**Are you requesting any Ancillary Facilities?:** N

**Ancillary Facilities**

**Comments:**

## Section 9 - Well Site

**Well Site Layout Diagram:**

SHEET\_G3\_20230418122319.pdf

**Comments:**

## Section 10 - Plans for Surface

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:**

**Multiple Well Pad Number:**

**Recontouring**

**Drainage/Erosion control construction:** Hilcorp will use appropriate erosion control/water management design features within the proposed project area. Hilcorp will use straw wattles as appropriate to limit erosion and sediment transport from any stockpiled soils. Culverts will be placed along the proposed access road for the proper drainage of potential stormwater run-off through the project area. A completed stormwater management plan is on file with the SUIT Department of Natural Resources, Water Resources Division.

**Drainage/Erosion control reclamation:** Hilcorp will use appropriate erosion control/water management design features within the proposed project area. Hilcorp will use straw wattles as appropriate to limit erosion and sediment transport from any stockpiled soils. Culverts will be placed along the proposed access road for the proper drainage of potential stormwater run-off through the project area. A completed stormwater management plan is on file with the SUIT Department of Natural Resources, Water Resources Division.

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

<b>Well pad proposed disturbance (acres):</b> 1.92	<b>Well pad interim reclamation (acres):</b> 0.34	<b>Well pad long term disturbance (acres):</b> 1.58
<b>Road proposed disturbance (acres):</b> 0.31	<b>Road interim reclamation (acres):</b> 0	<b>Road long term disturbance (acres):</b> 0
<b>Powerline proposed disturbance (acres):</b> 0	<b>Powerline interim reclamation (acres):</b> 0	<b>Powerline long term disturbance (acres):</b> 0
<b>Pipeline proposed disturbance (acres):</b> 0	<b>Pipeline interim reclamation (acres):</b> 0	<b>Pipeline long term disturbance (acres):</b> 0
<b>Other proposed disturbance (acres):</b> 0	<b>Other interim reclamation (acres):</b> 0	<b>Other long term disturbance (acres):</b> 0
<b>Total proposed disturbance:</b> 2.23	<b>Total interim reclamation:</b> 0.34	<b>Total long term disturbance:</b> 1.58

**Disturbance Comments:**

**Reconstruction method:** See attached Appendix A

**Topsoil redistribution:** See attached Appendix A

**Soil treatment:** See attached Appendix A

**Existing Vegetation at the well pad:**

**Existing Vegetation at the well pad**

Appendix\_A\_20230503114548.pdf

**Existing Vegetation Community at the road:** See attached Appendix A

**Existing Vegetation Community at the road**

**Existing Vegetation Community at the pipeline:** See attached Appendix A

**Existing Vegetation Community at the pipeline**

**Existing Vegetation Community at other disturbances:** See attached Appendix A

**Existing Vegetation Community at other disturbances**

**Non native seed used?** N

**Non native seed description:**

**Seedling transplant description:**

**Will seedlings be transplanted for this project?** N

**Seedling transplant description**

**Will seed be harvested for use in site reclamation?** N

**Seed harvest description:**

**Seed harvest description attachment:**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Seed**

**Seed Table**

**Seed Summary**

**Total pounds/Acre:**

**Seed Type**

**Pounds/Acre**

**Seed reclamation**

**Operator Contact/Responsible Official**

**First Name:** Bobby

**Last Name:** Spearman

**Phone:** (505)324-5112

**Email:** bspearman@hilcorp.com

**Seedbed prep:**

**Seed BMP:**

**Seed method:**

**Existing invasive species?** N

**Existing invasive species treatment description:**

**Existing invasive species treatment**

**Weed treatment plan description:** See attached Appendix A

**Weed treatment plan**

**Monitoring plan description:** See attached Appendix A

**Monitoring plan**

**Success standards:** See attached Appendix A

**Pit closure description:** No pit

**Pit closure attachment:**

**Section 11 - Surface**

**Disturbance type:** WELL PAD

**Describe:**

**Surface Owner:** BUREAU OF INDIAN AFFAIRS,PRIVATE OWNERSHIP

**Other surface owner description:**

**BIA Local Office:** SUIT

**BOR Local Office:**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Surface use plan certification:** YES

**Surface use plan certification document:**

BLM\_Access\_Memo\_Hilcorp\_701H\_Well\_Pad\_Executed\_20230530064217.pdf

**Surface access agreement or bond:** AGREEMENT

**Surface Access Agreement Need description:** 1.67ac of pad owned in FEE by SUIT

**Surface Access Bond BLM or Forest Service:**

**BLM Surface Access Bond number:**

**USFS Surface access bond number:**

**Disturbance type:** NEW ACCESS ROAD

**Describe:**

**Surface Owner:** PRIVATE OWNERSHIP

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Surface use plan certification:** YES

**Surface use plan certification document:**

BLM\_Access\_Memo\_Hilcorp\_701H\_Well\_Pad\_Executed\_20230530065314.pdf

**Surface access agreement or bond:** AGREEMENT

**Surface Access Agreement Need description:** 174.2 feet of access road owned in FEE by SUIT. 497.3 feet of access road is on Tribal Trust

**Surface Access Bond BLM or Forest Service:**

**BLM Surface Access Bond number:**

**USFS Surface access bond number:**

**Disturbance type:** PIPELINE

**Describe:**

**Surface Owner:** PRIVATE OWNERSHIP

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:**

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**USFS Forest/Grassland:**

**USFS Ranger District:**

**Surface use plan certification:** YES

**Surface use plan certification document:**

BLM\_Access\_Memo\_Hilcorp\_701H\_Well\_Pad\_Executed\_20230530065330.pdf

**Surface access agreement or bond:** AGREEMENT

**Surface Access Agreement Need description:** 188.88 feet of pipeline owned in FEE by SUIT operated by Harvest Pipeline LLC.

**Surface Access Bond BLM or Forest Service:**

**BLM Surface Access Bond number:**

**USFS Surface access bond number:**

## Section 12 - Other

**Right of Way needed?** Y

**Use APD as ROW?** Y

**ROW Type(s):** 281001 ROW - ROADS,288100 ROW – O&G Pipeline,288101 ROW – O&G Facility Sites

**ROW**

**SUPO Additional Information:**

**Use a previously conducted onsite?** N

**Previous Onsite information:**

**Other SUPO**

SHEET\_F\_20230418133144.pdf

SHEET\_E\_20230418133144.pdf

SHEET\_I\_20230418133144.pdf

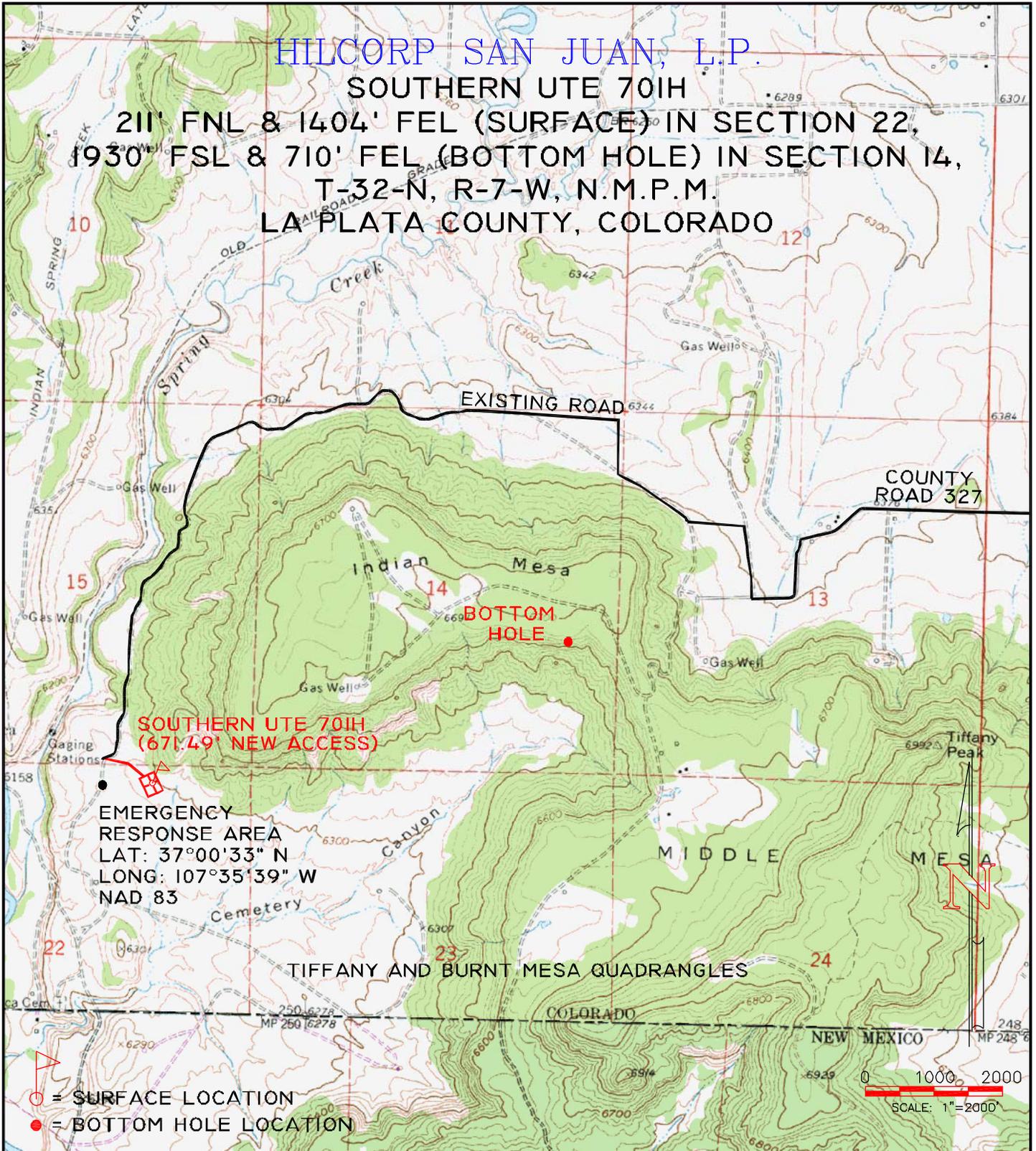
Southern\_Ute\_701H\_SUPO\_No\_attachments\_\_\_04112023\_20230418133508.pdf



# HILCORP SAN JUAN, L.P.

SOUTHERN UTE 70IH

211' FNL & 1404' FEL (SURFACE) IN SECTION 22,  
1930' FSL & 710' FEL (BOTTOM HOLE) IN SECTION 14,  
T-32-N, R-7-W, N.M.P.M.  
LA PLATA COUNTY, COLORADO



**SOUTHERN UTE 70IH  
(671.49' NEW ACCESS)**

**EMERGENCY  
RESPONSE AREA  
LAT: 37°00'33" N  
LONG: 107°35'39" W  
NAD 83**

- = SURFACE LOCATION
- = BOTTOM HOLE LOCATION

SURFACE TYPE: SOUTHERN UTE INDIAN TRIBE  
211' FNL, 1404' FEL (SURFACE) SEC. 22  
FOOTAGES: 1930' FSL, 710' FEL (BOTTOM HOLE) SEC. 14  
SEC. 22 TWN. 32 N RNG. 7 W N.M.P.M.  
LAT: N 37.0091594° LONG: W 107.5917874° (NAD 83)  
ELEVATION: 6295

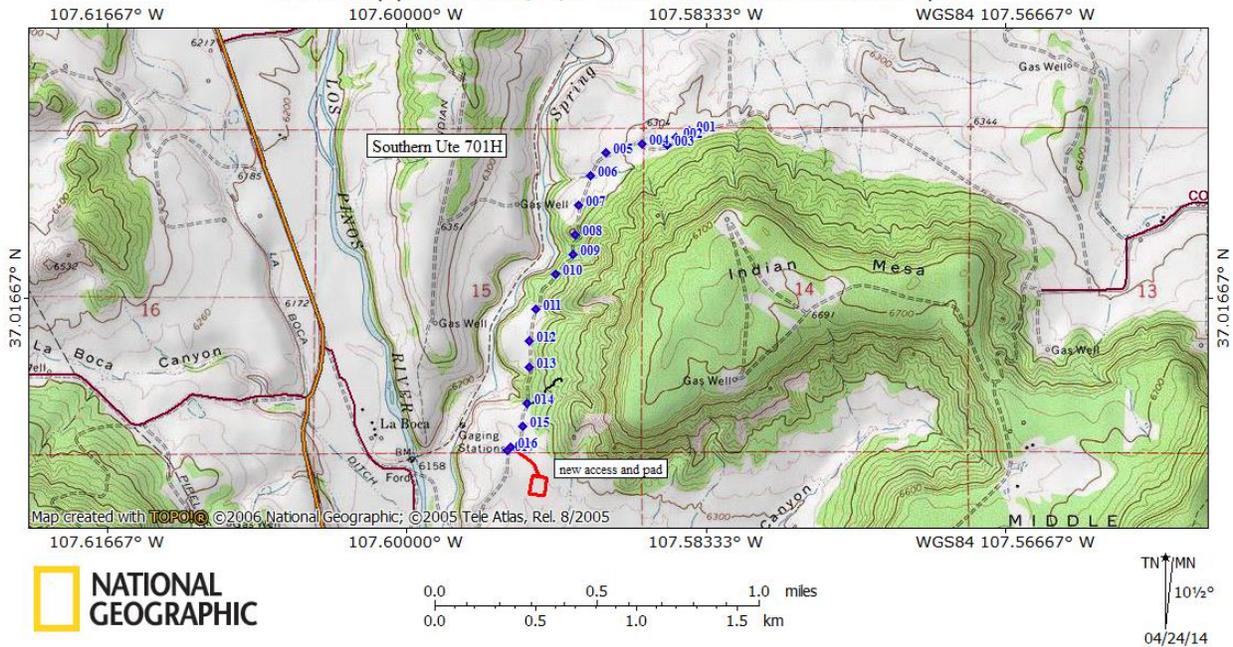
## HILCORP SAN JUAN, L.P.



P.O. BOX 3651  
FARMINGTON, NM 87499  
OFFICE: (505) 334-0408

DWG. NO. : 11732T01	REVISION: 1
DRAWN BY: K.S.	DATE DRAWN: 03/01/23
SURVEYED: 03/20/12	APP. BY: J.A.V.
REV. DATE:	SHEET: 1

TOPO! map printed on 04/24/14 from "Southern Ute 701H SUPO.tpo"



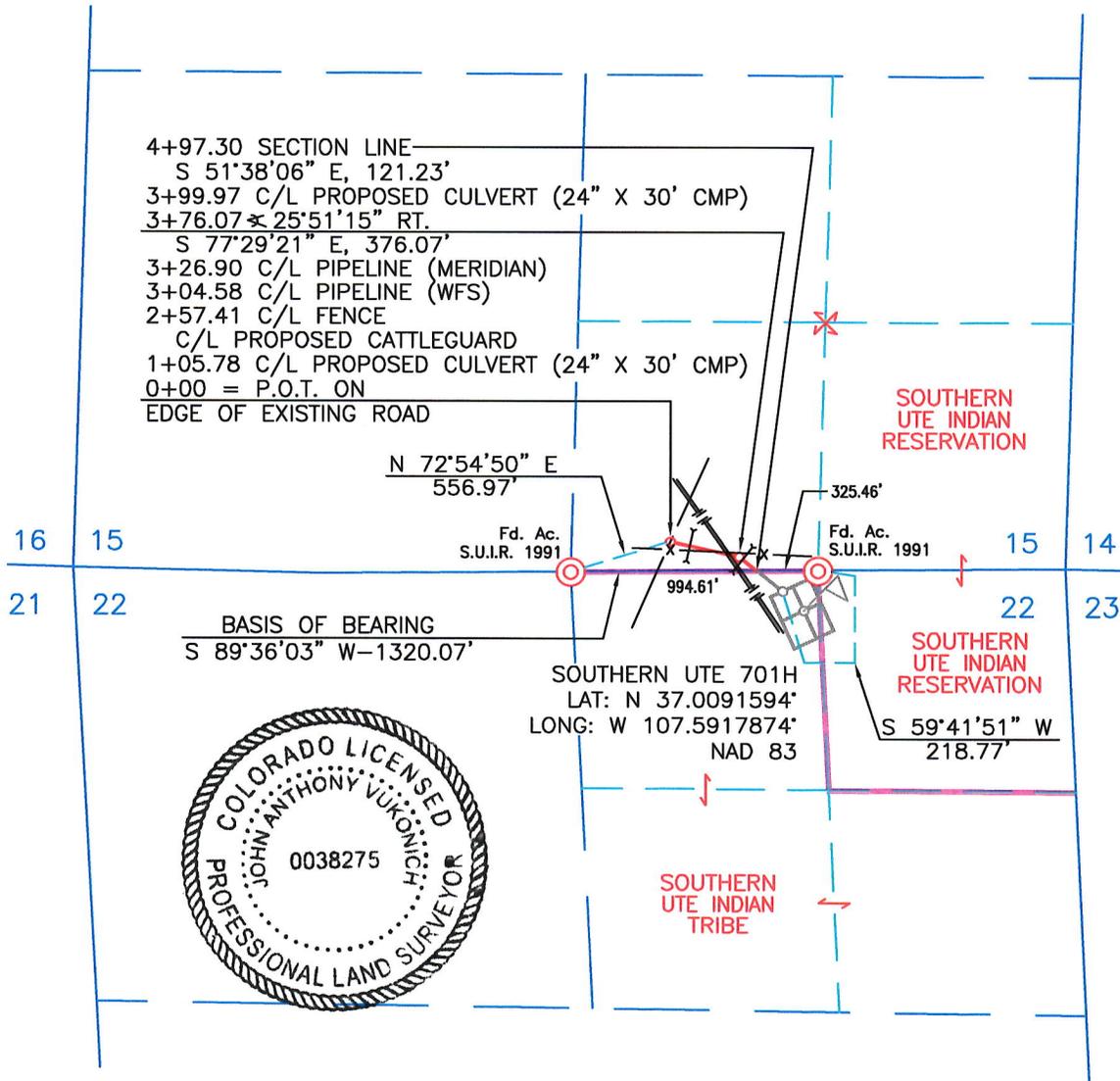
### Southern Ute 701H SUPO

1. 37.02414,-107.58427 BEGIN UPGRADE
2. 37.02382,-107.58501 INSTALL 1- 24" X 30' CMP
3. 37.02352,-107.58549 INSTALL 1 -24" X 30' CMP
4. 37.02357,-107.58689 ,INSTALL 1- 24" X 40' CMP DUMP RUN OFF INTO SILT TRAP
5. 37.02314,-107.58894 INSTALL 1- 24" X 40' CMP PLACE AT LONG ANGLE
6. 37.02213,-107.58977 EXTEND 24" CMP 10' TO THE WEST
7. 37.02079,-107.59042 INSTALL 1-24" X 40' CMP
8. 37.01947,-107.59064 INSTALL 1- 24" X 30' CMP
9. 37.01862,-107.59074 LOW WATER CROSSING
10. 37.01773,-107.59171 INSTALL 1- 24" X 30' CMP
11. 37.01619,-107.59281 LOW WATER CROSSING
12. ,37.01475,-107.59318 ,INSTALL 1- 24" X 40' CMP AT LONG ANGLE
13. ,37.01357,-107.59320 INSTALL 1- 24" X 40' CMP
14. 37.01194,-107.59331 INSTALL 2- 24" X 40' CMP SLIDE ROAD TO WEST 10'
15. ,37.01093,-107.59358 ,INSTALL 1- 24" X 30' CMP
16. 37.01003,-107.59422 BEGIN NEW ACCESS
17. 37.00988,-107.59440 END PROJECT

This road upgrade will be worked over a Samson Gas gathering line  
6786' of road will have 3" minus road base a COPC spec.

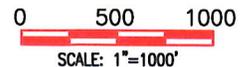
# HILCORP SAN JUAN, L.P.

## SOUTHERN UTE 701H PROPOSED ACCESS ROAD SW 1/4 SE 1/4 SEC. 15, T-32-N, R-7-W, N.M.P.M. LA PLATA COUNTY, COLORADO



**NOTES:**

1. BASIS OF BEARING: MONUMENTED SOUTH LINE OF THE SW 1/4 OF THE SE 1/4 OF SECTION 15, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.  
BEARS: S 89°36'03" W - 1320.07'
2. ALL BEARINGS & DISTANCES SHOWN ARE BASED UPON THE COLORADO COORDINATE SYSTEM, SOUTH ZONE, NAD 83.



OWNER	STATION	FEET/RODS
SOUTHERN UTE INDIAN RESERVATION	0+00 TO 4+97.30	497.30/30.139

I, JOHN A. VUKONICH, BEING A PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS PLAT WAS MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THE SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*John A. Vukonich* 3/15/2023  
 JOHN A. VUKONICH, CO. P.L.S. #38275 DATE

**HILCORP SAN JUAN, L.P.**

**UNITED**  
FIELD SERVICES INC.

P.O. BOX 3651  
FARMINGTON, NM 87499  
OFFICE: (505) 334-0408

DWG. NO. : 11732A02		REVISION: 1
DRAWN BY: C.B.	DATE DRAWN: 03/15/23	REV. DATE:
SURVEYED: 03/20/12	APP. BY: J.A.V.	SHEET: 1



# Hilcorp

## Road Maintenance Plan

The following Road Maintenance Plan will be implemented and followed by Hilcorp Energy Company (Hilcorp) for roads utilized in its San Juan Basin Operations. All roads will be constructed and maintained to meet Bureau of Land Management (BLM) Gold Book Standards, BLM Manuals 9113-1 (Roads Design Handbook), and BLM Manuals 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook).

### **Road Inspections**

1. A Hilcorp representative or designated inspector will conduct regular inspections of all newly constructed, reconstructed, and improved roads used for construction, operation, maintenance, and termination of Hilcorp's oil and gas operations.
2. Inspector will examine roads for proper maintenance of key features including: reduction of ruts and holes, maintenance of crowns and sloped areas related to the roads, condition of surface materials, efficacy of culverts and sediment traps, condition of interim reclamation, and presence of noxious weeds.
3. Road inspections will be conducted within 5 business days of major storm events such as major snow melt or prolonged rain, in order to ensure proper operation of drainage systems, and erosion and sediment control structures and features.
4. Inspectors will examine the roadways and document the inspection using the attached checklist during each inspection.
5. Inspection records will be filed and provided to the BLM upon written request.

### **Maintenance Procedures**

For existing County Roads or roads that are considered collector roads, Hilcorp would defer to the county or to the Roads Committee, when formed, for maintenance determinations.

Roads would be maintained to the same or better condition as existed prior to the commencement of operations. Maintenance would continue until final abandonment and reclamation of Hilcorp's related oil and gas operation.

Best management practices (BMPs) for dust abatement and erosion control would be utilized along the roads to reduce fugitive dust on as needed basis. Water application using a rear-spraying truck or other suitable means would be the primary method of dust suppression along the roads.

No routine maintenance activities would be performed during periods when the soil is too wet to adequately support construction equipment. If equipment creates ruts deeper than 6 inches, the soil would be deemed too wet for construction or maintenance.

In addition to regular maintenance, road inspection would be used to identify any additional maintenance needs.



## **Road and Drainage Structures and Features**

### *1. Road Crown*

Maintenance of road crowns will be conducted to rectify ruts, holes, and rough areas and ensure adequate drainage on road features and outlopes. Needed maintenance will be conducted using a maintainer to re-grade and/or resurface the road crown.

### *2. Culverts*

Culverts and silt trap maintenance and/or repair will be conducted on as-needed basis, using hand tools or machinery such as a back hoe. Excavation and debris removal activities will be conducted in accordance to the requirements of the surface management agency and conducted with compliance to applicable Clean Water Act-Best Management Practices, and applicable requirements for passage for aquatic species. If the culvert is damaged by having its inlet or outlet crushed, it would be replaced.

### *3. Ditches*

Road side ditches will be maintained to ensure proper function, on as-needed basis, using maintainer or the appropriate equipment to clear and/or blade as necessary. Maintenance activities will be implemented with consideration of resource objective for soil, water, and visual quality as is feasible with relation to maintenance costs.

### *4. Silt Traps and Water Control Structures*

Silt traps and water control structures will be maintained to ensure proper function, on as-needed basis using maintainer or the appropriate equipment to clear, excavate, and/or blade as necessary. Sediment removed from silt traps and water control structures would be disposed at an approved facility or utilized for construction activities with the approval of the surface management agency.

### *5. Replacement of Road Surface Material*

Road surface material will be maintained and supplemented/replaced on as-needed basis, using the appropriate substrate from an approved source, in order to maintain proper road operation and condition.

### *6. Maintenance of Interim Reclamation*

Disturbance related to maintenance activities will be subject to interim reclamation and stabilizations standards and guidelines, in order to meet objectives outlined in the reclamation plan, as pertaining to projects on case-by-case basis.

### *7. Noxious Weeds*

Should any noxious or invasive weeds be documented during the inspection and/or maintenance activities, the BLM/FFO weed coordinator will provide Hilcorp with specific requirements and instructions for weed treatments, including the period of treatment, list of approved herbicides, required documentation to be submitted to the BLM/FFO after treatment, and any other site-specific instructions that may be applicable.



Hilcorp Road Inspection and Maintenance Report Form				
Road Inspected (Well ID):		Type of Area:		
Title of Inspector:		Access Road to Well Pad:		
Name of Inspector:		Type of Inspection: (Monthly/Major Storm/Winter Event)		
Site Inspection Information				
Road Condition Checklist				
Road Feature:	Good	Poor	Action Needed	Comments
Road Crown				
Surface Condition (slopes/gravel)				
Surface Drainage				
Culvert(s)				
Ditches and Turnouts				
Revegetation				
Noxious Weeds				
Sediment Control:	Good	Poor	Action Needed	Comments
Check Dam				
Silt Trap/Sediment Pond				
Filter Berm				
Sediment Trap				
Sediment Basin				
Wattles				
Silt Fence				
Actions Taken			Date Work Was Performed	
Type of Inspection	Date:	Signature:		

Signature certifying that the site is in compliance (after all the necessary repairs, maintenance, and changes are completed)

\_\_\_\_\_

Date

\_\_\_\_\_

Signature

March 15, 2023

**HILCORP SAN JUAN, L.P.**  
**SOUTHERN UTE 701H PROPOSED ACCESS ROAD**  
**LOCATED IN THE NW 1/4 NE 1/4 OF**  
**SECTION 22, T-32-N, R-7-W, N.M.P.M.**  
**LA PLATA COUNTY, COLORADO**

THE DESCRIPTION OF A 20 FOOT RIGHT-OF-WAY FOR A PROPOSED ACCESS ROAD, LOCATED IN THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 22, TOWNSHIP 32 NORTH, RANGE 7 WEST, N.M.P.M., LA PLATA COUNTY, COLORADO, BEING 10 FEET ON EACH SIDE AND PERPENDICULAR TO THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT A FOUND 1991 S.U.I.R. ALUMINUM CAP FOR THE NORTH QUARTER CORNER OF SAID SECTION 22, THENCE NORTH  $89^{\circ}36'03''$  EAST A DISTANCE OF 994.61 FEET TO THE "POINT OF BEGINNING" FOR THIS DESCRIPTION;

THENCE SOUTH  $51^{\circ}38'06''$  EAST A DISTANCE OF 174.19 FEET TO A POINT IN SAID NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 22. SAID POINT BEARS SOUTH  $59^{\circ}41'51''$  WEST, A DISTANCE OF 218.77 FEET FROM A FOUND 1991 S.U.I.R. ALUMINUM CAP FOR THE EAST ONE SIXTEENTH CORNER COMMON TO SECTION 15 AND SECTION 22.

THE TOTAL LENGTH OF THE CENTERLINE AS DESCRIBED ABOVE, IS 174.19 FEET, 10.557 RODS OR 0.033 MILE IN LENGTH. 20 FOOT RIGHT-OF-WAY CONTAINS 0.080 ACRE, MORE OR LESS.

BASIS OF BEARING - THE MONUMENTED SOUTH LINE OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 15, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO. LINE BEARS SOUTH  $89^{\circ}36'03''$  WEST A DISTANCE OF 1320.07 FEET AS MEASURED BY GPS.

SURVEYOR'S CERTIFICATION

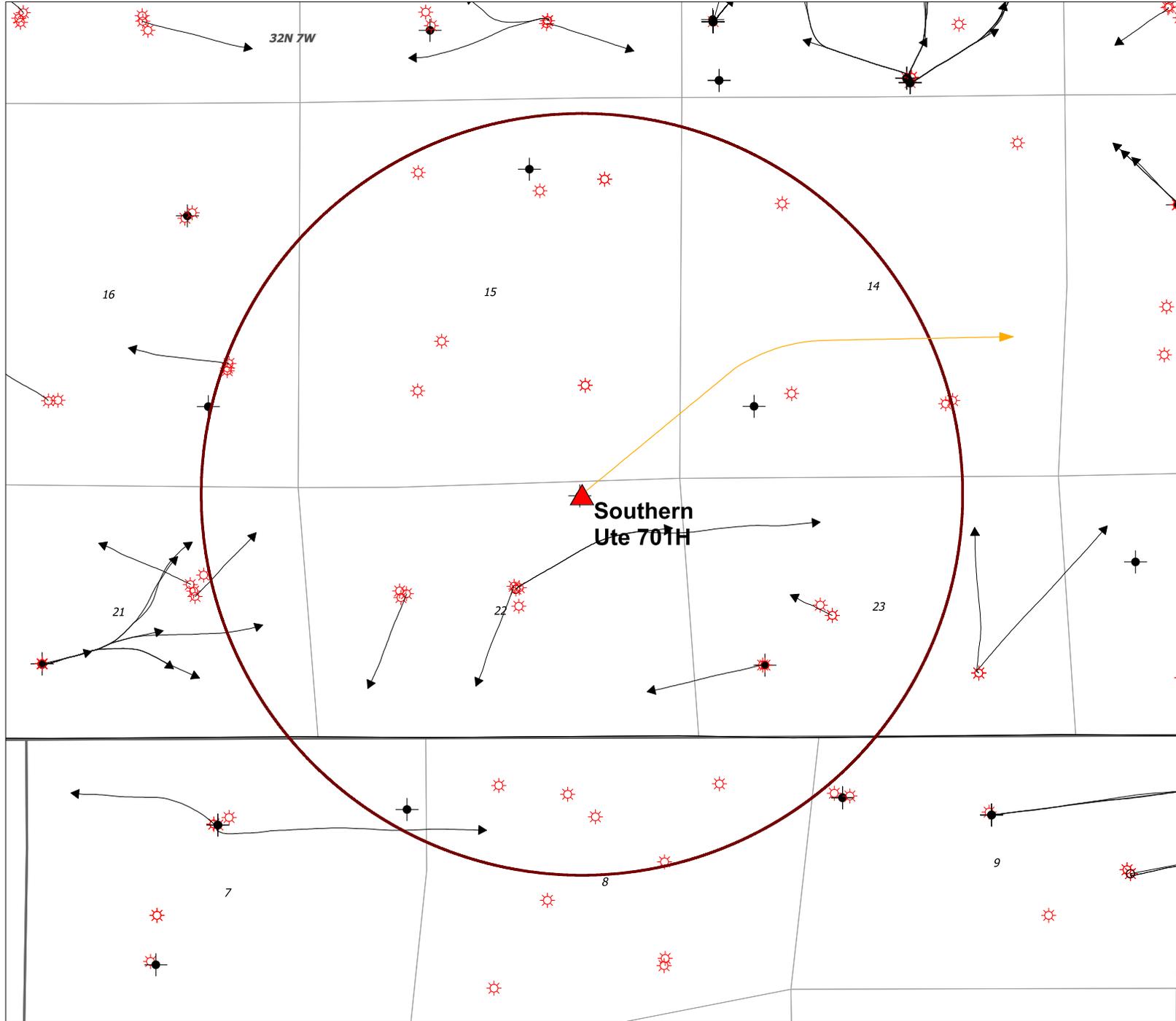
I, JOHN A. VUKONICH, BEING A PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS DESCRIPTION WAS MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THIS DESCRIPTION ACCURATELY REPRESENTS THE SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.

  
JOHN A. VUKONICH, CO. P.L.S. #38275

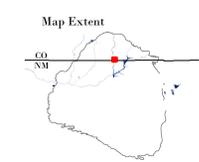
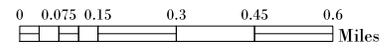
  
DATE

DWG. No: 11732A03





- ▲ Southern Ute 701H SH
- ☀ Gas Well
- Southern Ute 701H Wellbore
- ⊙ Abandoned Loc
- Southern Ute 701H SH 1 mile buffer
- Location



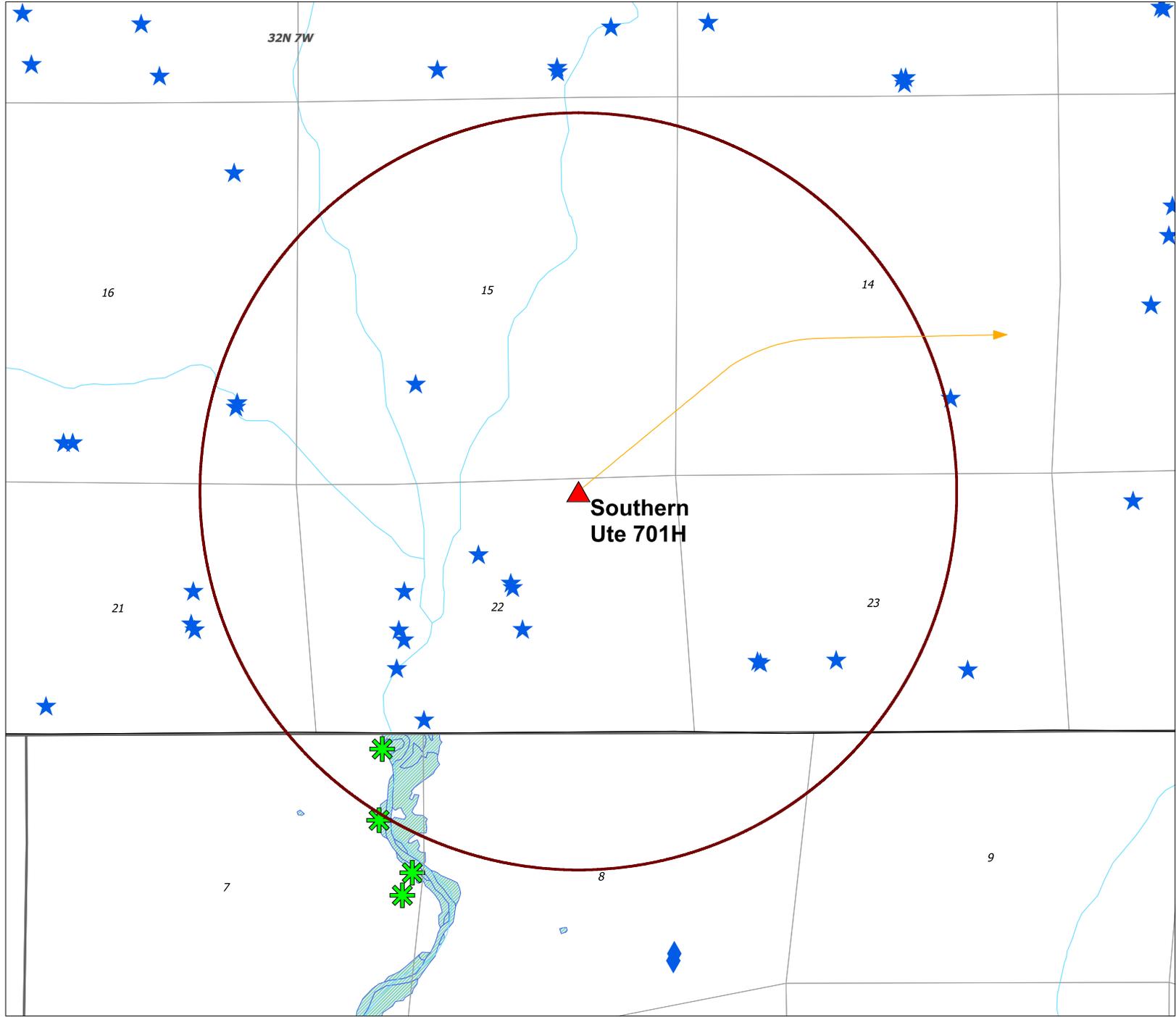
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 Units: Foot US



**Southern Ute 701H  
 1 Mile Buffer**

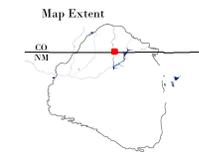
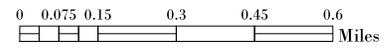
Scale: 1:5,000.0	Author: Max Molella	Date: 4/10/2023
File Path: O:\Farlington\Dept\GIS\Map Layers\Max_working_files\Working Hilcorp.mxd		

**SHEET D1**



- ▲ Southern Ute 701H SH
- Southern Ute 701H Wellbore
- Southern Ute 701H SH 1 mile buffer
- ★ CO Water Wells
- ◆ Hydrogeologic
- ✱ NM Water Wells

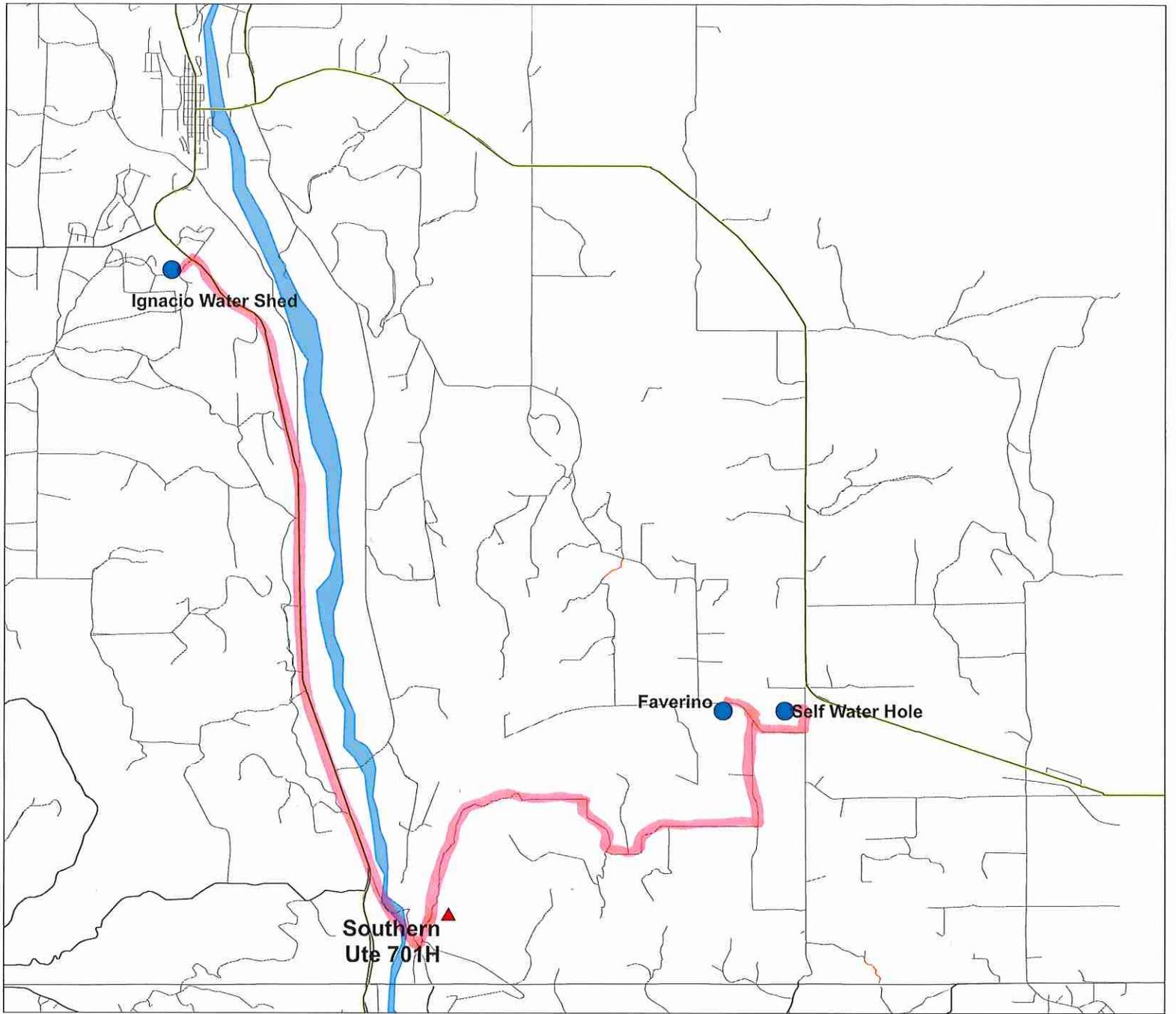
**SHEET D2**



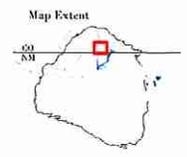
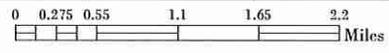


**Southern Ute 701H  
1 Mile Buffer**

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Datum: North American 1927	File Path: O:\Farlington\Dept\GIS\Map Layers\Max_working_files\Working Hilcorp.mxd	Date: 4/10/2023
Units: Foot US		



- ▲ Southern Ute 701H SH
- Highways
- No Access
- Main Road
- Road



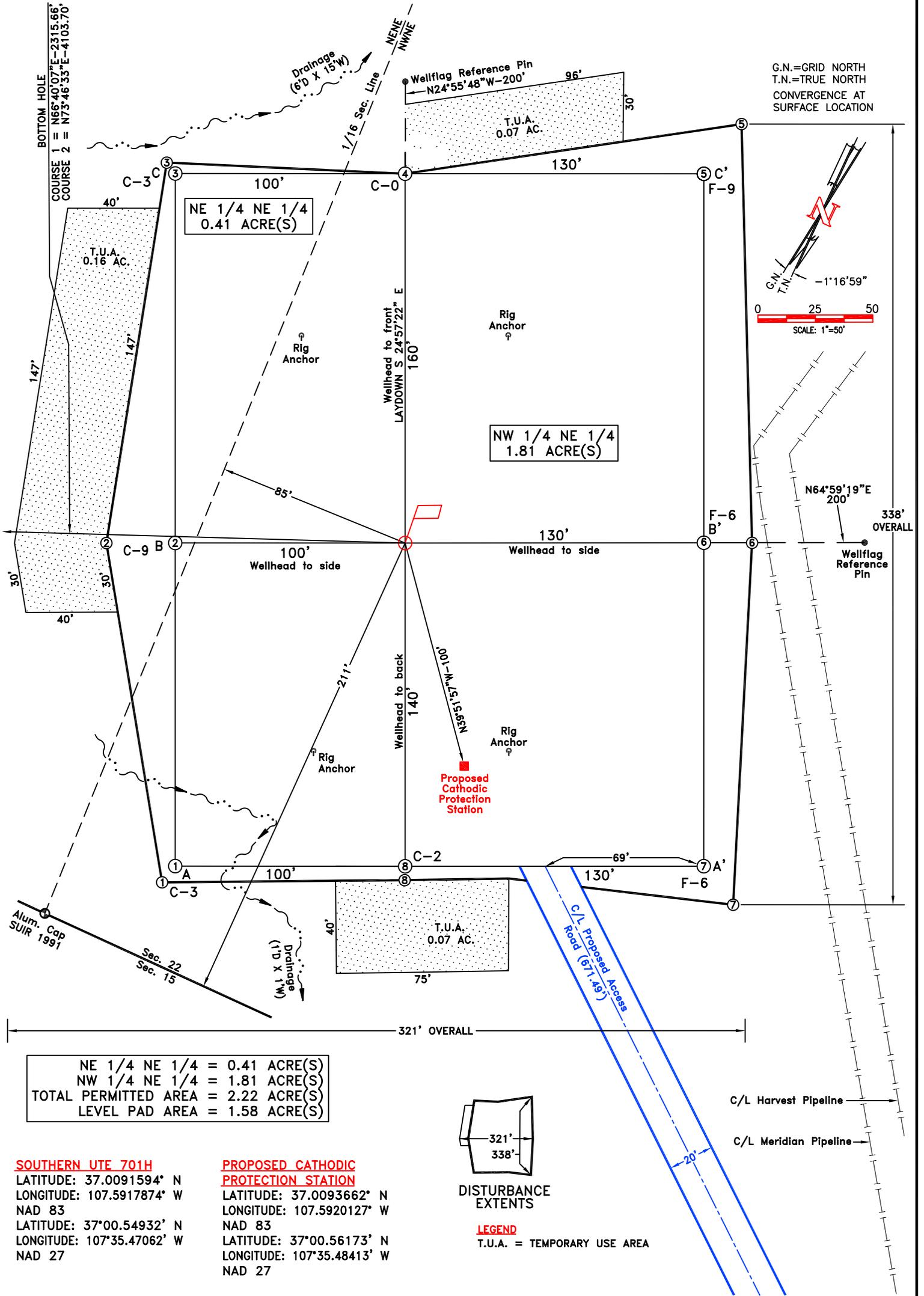
**Southern Ute 701H  
Water Trucking**

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Datum: North American 1983			
Units: Foot US			
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- Preferred Water Transportation Route

HILCORP SAN JUAN, L.P.

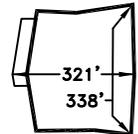
SOUTHERN UTE 701H – 211' FNL & 1404' FEL (SURFACE) IN SECTION 22,  
 1930' FSL & 710' FEL (BOTTOM HOLE) IN SECTION 14,  
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO  
 GROUND ELEVATION: 6295



NE 1/4 NE 1/4 = 0.41 ACRE(S)  
 NW 1/4 NE 1/4 = 1.81 ACRE(S)  
 TOTAL PERMITTED AREA = 2.22 ACRE(S)  
 LEVEL PAD AREA = 1.58 ACRE(S)

**SOUTHERN UTE 701H**  
 LATITUDE: 37.0091594° N  
 LONGITUDE: 107.5917874° W  
 NAD 83  
 LATITUDE: 37°00.54932' N  
 LONGITUDE: 107°35.47062' W  
 NAD 27

**PROPOSED CATHODIC PROTECTION STATION**  
 LATITUDE: 37.0093662° N  
 LONGITUDE: 107.5920127° W  
 NAD 83  
 LATITUDE: 37°00.56173' N  
 LONGITUDE: 107°35.48413' W  
 NAD 27



DISTURBANCE EXTENTS

**LEGEND**  
 T.U.A. = TEMPORARY USE AREA

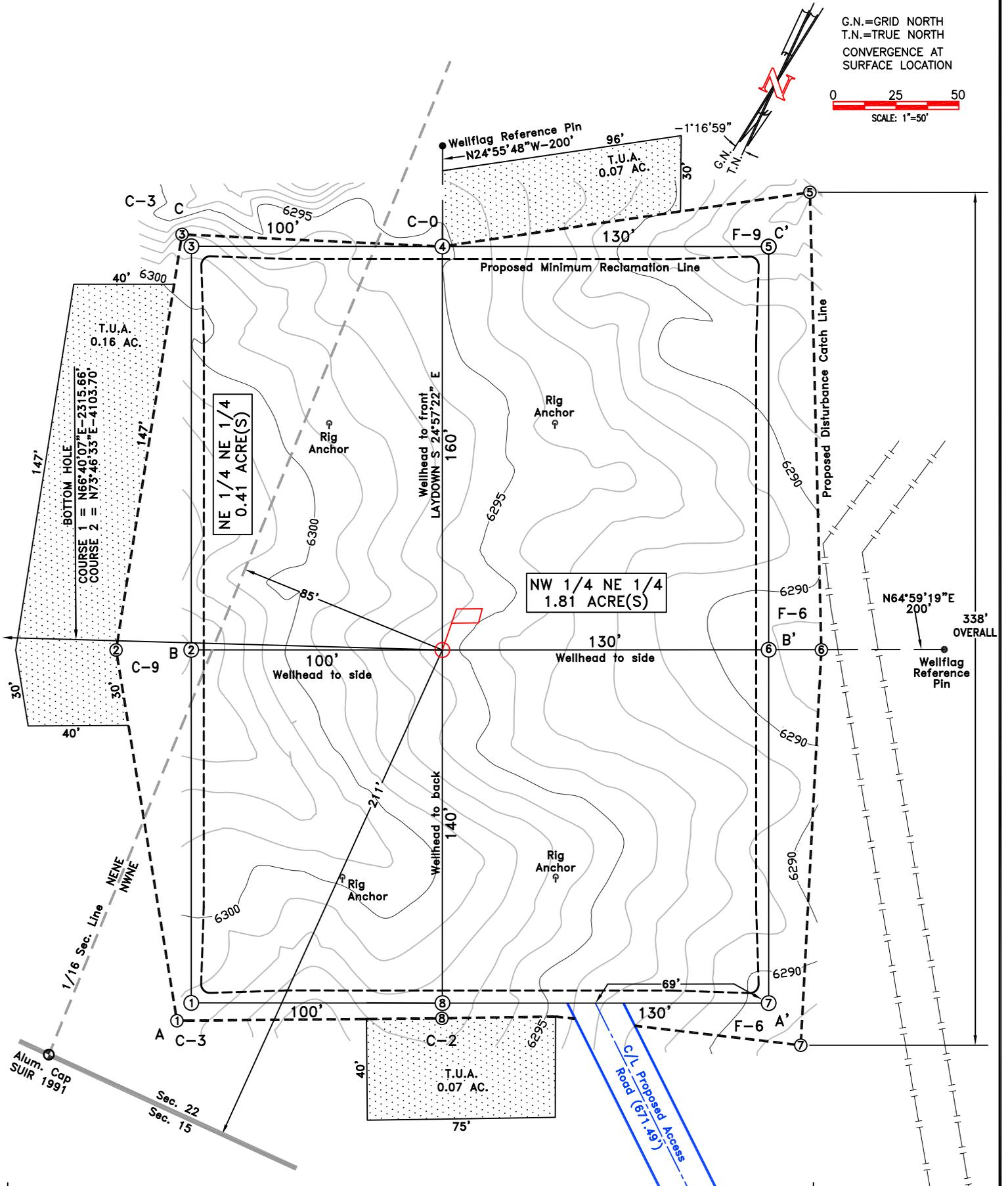
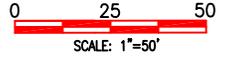
- NOTES:**
- 1.) BEARINGS & DISTANCES SHOWN ARE REFERENCED TO THE COLORADO COORDINATE SYSTEM, SOUTH ZONE, NAD 83.
  - 2.) CONTRACTOR SHALL CONTACT "ONE-CALL" FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
  - 3.) UNITED FIELD SERVICES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
  - 4.) CUT & FILL CALCULATIONS ARE ROUNDED TO THE NEAREST FOOT.

		P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408	
DWG. NO. : 11732L01		REVISION: 1	
DRAWN BY: K.S.	DATE DRAWN: 03/01/23	REV. DATE:	
SURVEYED: 03/20/12	APP. BY: J.A.V.	SHEET G1	

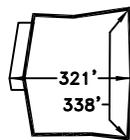
HILCORP SAN JUAN, L.P.

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 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO  
 GROUND ELEVATION: 6295

G.N.=GRID NORTH  
 T.N.=TRUE NORTH  
 CONVERGENCE AT  
 SURFACE LOCATION



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DISTURBANCE  
 EXTENTS

**SOUTHERN UTE 701H**

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DWG. NO. : 11732L02		REVISION: 1	
DRAWN BY: K.S.	DATE DRAWN: 03/01/23	REV. DATE:	
SURVEYED: 03/20/12	APP. BY: J.A.V.	SHEET G2	





Hilcorp Energy Company  
1111 Travis Street  
Houston, Texas 77002  
Phone: (713) 209-2400

**Revegetation Plan for Southern Ute 701H**

**Surface Hole Location:** 211' FNL & 1404' FEL,  
Unit Letter B (NWNE) Sec. 22, T32N, R7W

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## I. BACKGROUND

Applicant:	Hilcorp San Juan, L.P.
Project Type:	Horizontal Oil & Gas Well Project
Project Name:	Southern Ute 701H
Legal Location:	NE/4 of Section 22 and SE/4 of Section 15, Township 32 North, Range 7 West, New Mexico Principle Meridian (NMPM), in La Plata County, Colorado.

### Introduction

This reclamation plan has been prepared based on requirements and guidelines of the Bureau of Land Management (BLM) Tres Rios Field Office, and Onshore Oil and Gas Order No. 1.

The Hilcorp contact person for this Reclamation Plan is:

Bobby Spearman  
Construction Foreman  
505-324-5112  
bspearman@hilcorp.com

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### *Plans for Surface Reclamation*

According to Onshore Oil and Gas Order No. 1 under the authority of the Code of Federal Regulations, Title 43: Subpart 3164, the operator must submit a plan for the surface reclamation or stabilization of all disturbed areas. This plan must address interim (during production) reclamation for area of the well pad not needed for production, as well as final abandonment of the well location, facilities or improvements.

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### *Revision of the Reclamation Plan*

Hilcorp may submit a request to the BLM/SUIT to revise the Reclamation Plan at any time during the life of the project in accordance to page 44 of the Gold Book (USDI-USDA 2007). Hilcorp will include justification for the revision request.

### Project Description

The proposed project is located on the Southern Ute Indian Reservation (SUIR) in La Plata County, Colorado. Hilcorp is proposing to construct a 230-foot by 300-foot well pad, a 672-foot access road, and a 189-foot subsurface well-tie pipeline near the Colorado-New Mexico State line approximately 3.3 miles southwest of Tiffany and 20 miles southeast of Durango. The project area is situated at the southwest base of Indian Mesa in Great Basin Desert scrub.

Disturbed surfaces will be located on SUIR lands administered by the Southern Ute Indian Tribe and the Bureau of Indian Affairs, Ignacio, Colorado; and the Bureau of Land Management's Tres Rios Field Office, Durango, Colorado.

### Estimated Total Area of Disturbance

The entire well pad, including three temporary use areas (TUA's) and construction buffer area, would be constructed on the SUIR within a total permitted area of 2.22 acres. The project would require the construction of a 672-foot access road within a 20-foot-wide corridor which would result in approximately

0.31 acre of new surface disturbance. Once the well has been completed and proves to be viable, Hilcorp would construct a 189-foot, subsurface well-tie pipeline overlapping the proposed well pad area and previously permitted pipeline construction corridor, and would not result in new surface disturbance.

Total potential new surface disturbance for the development would be approximately 2.22 acres. The entire pipeline corridor and TUA would be reclaimed following construction. Production equipment will be placed on the well pad in such a manner to allow proper safe access to produce and service the well/facilities while minimizing long-term disturbance and maximizing interim reclamation. As practical, access will be provided by a tear-drop shaped road through the production area. The well pad area will be reclaimed to an approved working area.

## Pre-Disturbance Site Visit and Site Conditions

This plan is based on observations made during numerous pre-disturbance site visits and compiled from information obtained from consultation with multiple agencies including SUIT, BLM-Tres Rios, and BIA.

### Vegetation Community

Based on observations made during pre-disturbance site visits, it has been determined that the vegetation community which best represents the proposed project area is Sagebrush Community. This community is comprised primarily of Wyoming big sage with lesser amounts of basin big sage and minor areas of black sage. It is found on all aspects from about 5,000 to 7,200 feet but is most common on southerly and western aspects. Soils vary from clayey to fine sandy loam to loamy in texture with sandy sites being more pervasive.

### Proposed Reclamation Seed Mix

Hilcorp will use the Mix #1 reclamation seed mix developed by the SUIT Department of Natural Resources, Range Division, for use on lands near the Los Piños River valley and east of U.S. Highway 550 on the SUIR (see Table 1 below).

**Table 1. SUIT Mix #1 Reclamation Seed Mix**

Common Name	Scientific Name	Pounds/PLS/acre
Western wheatgrass	<i>Agropyron smithii</i>	7
Antelope bitterbrush	<i>Purshia tridentata</i>	1
Smooth brome	<i>Bromus inermis</i>	4
Intermediate wheatgrass	<i>Thinopyrum intermedium</i>	3
Annual Sterile Ryegrass or Sterile Triticale		12

### Vegetation Reclamation Standards

The SUIT Department of Natural Resources, Range Division considers a site adequately reclaimed once 70 percent revegetation has been achieved. Hilcorp will document the progress of reclamation at the proposed Southern Ute 701H project site with photographs during routine site inspections in conjunction with stormwater management practices at the site. The SUIT will be notified upon attainment of 70 percent revegetation at the project site.

### Pre-Disturbance Weed Survey

During the pre-disturbance site visit, the proposed action area was surveyed for invasive and/or noxious weeds listed by La Plata County, the State of Colorado, and the SUIT. Cheat grass or downy brome (*Bromus tectorum*), a State of Colorado (CO) List C noxious weed, was documented within the area.

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## ***Pre-Disturbance Site Photographs***

Photographs can be found in Appendix C of the Biological Assessment on file with the BLM Tres Rios Field Office or SUIT Department of Natural Resources, Division of Wildlife Resource Management.

## **II. PLAN FOR SURFACE RESTORATION**

### **Techniques for Successful Revegetation**

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#### ***Vegetation and Site Clearing***

Woody vegetation, such as large shrubs and trees, will be cleared from the staked project area and stockpiled for later use as soil mulch, visual mitigation, and/or wildlife shelter.

Surface rocks (where present and useful for reclamation) will be stockpiled adjacent to the topsoil stockpile. During reclamation activities, the surface rock will be placed within the area of reclamation for erosion control or in a manner that visually blends with the adjacent undisturbed area.

#### ***Topsoil Stripping, Storage, and Redistribution***

If available, the upper 6 inches of topsoil will be stripped, following vegetation and site clearing during construction activities. Hilcorp contractors will take care not to mix topsoil with the underlying subsoil horizons and will stockpile the topsoil separately from subsoil or other excavated material. Topsoil and sub-surface soils will be replaced in the proper order, prior to final seedbed preparation.

#### ***Water Management/Erosion Control Features***

Hilcorp will use appropriate erosion control/water management design features within the proposed project area. Hilcorp will use straw wattles as appropriate to limit erosion and sediment transport from any stockpiled soils. Culverts will be placed along the proposed access road for the proper drainage of potential stormwater run-off through the project area. A completed stormwater management plan is on file with the SUIT Department of Natural Resources, Water Resources Division.

#### ***Seedbed Preparation***

Areas to be reclaimed will be re-contoured to blend with the surrounding landscape, emphasizing restoration of existing drainage patterns and landform to pre-construction condition, to the extent practicable.

Seedbed preparation of compacted areas will be ripped to a minimum depth of 12 inches, with a maximum furrow spacing of 2 feet. Where practicable, ripping will be conducted in two passes at perpendicular directions. Disking will be conducted if large clumps or clods remain after ripping. Any tilling or disking that occurs along the contour of the slope and seed drills will also be run along the contour to provide terracing and prevent rapid run-off and erosion. If broadcast seeding is used, a dozer or other tracked equipment will track perpendicular to the slope prior to broadcast seeding.

Following final contouring, the backfilled or ripped surfaces will be covered evenly with stockpiled topsoil. Final seedbed preparation will consist of raking or harrowing the spread topsoil prior to seeding to promote a firm (but not compacted) seedbed without surface crusting. Seedbed preparation may not be necessary for topsoil storage piles or other areas of temporary seeding.

#### ***Soil Treatments***

It has not been determined at this time if soil amendments will be used during reclamation of the affected environment.

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## **Seeding**

Seeding will occur within 90 days following project completion.

A Truax seed drill or modified rangeland drill that allows for seeding species from different seed boxes at different planting depths will be used to seed the disturbed areas of the project area. Hilcorp or its reclamation contractor will ensure that perennial grasses and shrubs are planted at the appropriate depth. Intermediate size seeds (such as wheatgrasses and shrubs) will be planted at a depth of 1 to 2 inches. Small seeds (such as alkali sacaton and sand dropseed) will be planted at a depth of 0.25 inch. In situations where differing planting depths are not practicable using available equipment, the entire seed mix will be planted no deeper than 0.25 inch.

Drill seeding may be used on well-packed and stable soils that occur on gentler slopes and where equipment and drills can safely operate. Where drill seeding is not practicable due to topography, the reclamation contractor will hand-broadcast seed using a “cyclone” hand seeder or similar broadcast seeder. Broadcast application of seed requires a doubling of the drill-seeding rate. The seed will then be raked into the ground so the seed is planted no deeper than 0.25 inch below the surface.

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## **Mulching**

Hand seeding with hydro-mulch, excelsior netting, and/or mulch with netting may be required on cut and fill slopes. Mulch should be grass or straw spread at 2,000 to 3,000 pounds per acre, or approximately 1 to 2 inches deep. Mulching will consist of crimping certified weed-free straw or certified weed-free native grass hay into the soil.

Straw or native grass hay mulch can be applied by hand broadcasting or blowing to a relatively uniform depth of 2 to 3 inches, equivalent to a rate of approximately 2 tons per acre (one 74-pound bale per 800 square feet). When applied properly, approximately 20 to 40 percent of the original ground surface will be visible.

Straw or native grass hay mulch will then be anchored using one of the following methods:

- Hand Punching – a spade or shovel is used to punch mulch into the topsoil at 1-foot intervals until all areas have mulch standing perpendicular to the slope and the mulch is embedded at least 4 inches into the soil.
- Roller Punching – a roller is used to spread mulch over an area; the roller is equipped with straight studs not less than 6 inches long, from 4 to 6 inches wide, and approximately 1 inch thick.
- Crimper Punching – similar to roller punching, a crimper is used over the soil. The crimper has serrated disk blades about 4 to 8 inches apart that force the mulch into the soil. Crimping should be done in two directions with the final pass across the slope.

Mulch applications in extremely clayey soils should be evaluated carefully to avoid developing an adobe mixture. In these cases, a soil amendment may be beneficial.

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## **Noxious and Invasive Weed Control**

Should noxious or invasive weeds be documented after earthwork and seeding activities, Hilcorp will follow SUIT and/or BLM requirements and instructions for weed treatments, including the period of treatment, approved herbicides that may be used, required documentation to be submitted to the SUIT and/or BLM after treatment, and any other site-specific instructions that may be applicable.

### III. MONITORING AND FINAL ABANDONMENT

#### Monitoring Plan

Monitoring will be completed according to SUIIT and/or BLM requirements. Monitoring activities will be initiated after the project is completed, during the post-disturbance earthwork and seeding inspection process.

Annual visual inspection of the reclaimed areas will be conducted by Hilcorp until vegetation reclamation cover standards have been met (see page 2, Vegetation Reclamation Standards).

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#### *Final Abandonment*

Upon final abandonment, Hilcorp will file for ROW Grant termination with the SUIIT. Hilcorp would relinquish ROW Grants for the well pad and access road/pipeline corridor. Well-plugging will be done according to procedures outlined on page 44 of the Gold Book (USDI-USDA 2007). Surface disturbances within the ROW Grant areas will be returned to pre-disturbance conditions as practicable according to SUIIT procedure.

#### References

43 CFR Part 3160, "Onshore Oil and Gas Order No. 1; Onshore Oil and Gas Operations; Federal and Indian Oil and Gas Leases; approval of Operations," 72 Federal Register 44 (march 2007), pp. 10328-10338.

U.S. Department of the Interior, U.S. Department of Agriculture (USDI, USDA). 2007. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+307/REV 07. Bureau of Land Management, Denver, Colorado. 84 pp.

# SOUTHERN UTE INDIAN TRIBE

---

D E P A R T M E N T O F E N E R G Y

## Memo

**To:** Hilcorp San Juan, L.P.

**From:** Ryan Terry, SUIT DOE Landman I

**Date:** May 23, 2023

**Re:** BLM Access Letter for Hilcorp San Juan, L.P.'s ("Hilcorp") Southern Ute 701H Well Pad

---

On May 23, 2023 Tribal Council consented to the approval of a Surface Use Agreement for the Southern Ute 701H Well Pad from which Hilcorp proposes to drill a new horizontal Fruitland Coal Formation well. Hilcorp San Juan L.P. intends to submit an APD to drill, complete, produce, and eventually abandon a well into the Fruitland Coal formation (hereinafter, the "Well"). A portion of the well pad and access road leading to the Well will be located on lands owned by the Southern Ute Indian Tribe.

The Department of Energy is currently working with Hilcorp and the BLM in reviewing their APD, ensuring that all Federal Regulations are met.

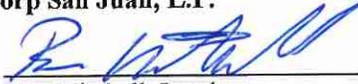
The Southern Ute 701H Well Pad is located on both Tribal Fee Surface and Tribal Trust Surface. Because of this, the BLM requires a letter from an authorized representative granting the BLM surface access to the Southern Ute 701H Well Pad for the monitoring of production and measurement of the wells, as set forth in U.S. DOI BLM Permanent Instruction Memorandum No. 201-014. Without the access letter, the BLM cannot complete their review or give their recommendation for approval of the APD to the BIA.

According to the Tribal Council Policy Regarding the Roles and Responsibilities of Tribal Departments and Divisions Involved in Energy-Related Projects on the Southern Ute Indian Reservation, approved under Tribal Council Resolution No. 2012-203, dated September 13, 2012, the Department of Energy is authorized as the lead agency over ingress and egress access issues on energy related projects.

The Department of Energy on behalf of the Southern Ute Indian Tribe and Hilcorp San Juan, L.P., give the BLM surface access to the above referenced Southern Ute 701H Well Pad.

May 23, 2023

**Hilcorp San Juan, L.P.**

By:   
Ben Mitchell, Landman

Date: 5/24/2023

**Southern Ute Department of Energy**

By:   
Andy Wetherell, Energy Manager  
Southern Ute Department of Energy

Date: 5-23-2023

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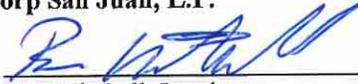
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By:   
Ben Mitchell, Landman

Date: 5/24/2023

**Southern Ute Department of Energy**

By:   
Andy Wetherell, Energy Manager  
Southern Ute Department of Energy

Date: 5-23-2023

# SOUTHERN UTE INDIAN TRIBE

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On May 23, 2023 Tribal Council consented to the approval of a Surface Use Agreement for the Southern Ute 701H Well Pad from which Hilcorp proposes to drill a new horizontal Fruitland Coal Formation well. Hilcorp San Juan L.P. intends to submit an APD to drill, complete, produce, and eventually abandon a well into the Fruitland Coal formation (hereinafter, the "Well"). A portion of the well pad and access road leading to the Well will be located on lands owned by the Southern Ute Indian Tribe.

The Department of Energy is currently working with Hilcorp and the BLM in reviewing their APD, ensuring that all Federal Regulations are met.

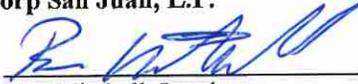
The Southern Ute 701H Well Pad is located on both Tribal Fee Surface and Tribal Trust Surface. Because of this, the BLM requires a letter from an authorized representative granting the BLM surface access to the Southern Ute 701H Well Pad for the monitoring of production and measurement of the wells, as set forth in U.S. DOI BLM Permanent Instruction Memorandum No. 201-014. Without the access letter, the BLM cannot complete their review or give their recommendation for approval of the APD to the BIA.

According to the Tribal Council Policy Regarding the Roles and Responsibilities of Tribal Departments and Divisions Involved in Energy-Related Projects on the Southern Ute Indian Reservation, approved under Tribal Council Resolution No. 2012-203, dated September 13, 2012, the Department of Energy is authorized as the lead agency over ingress and egress access issues on energy related projects.

The Department of Energy on behalf of the Southern Ute Indian Tribe and Hilcorp San Juan, L.P., give the BLM surface access to the above referenced Southern Ute 701H Well Pad.

May 23, 2023

**Hilcorp San Juan, L.P.**

By:   
Ben Mitchell, Landman

Date: 5/24/2023

**Southern Ute Department of Energy**

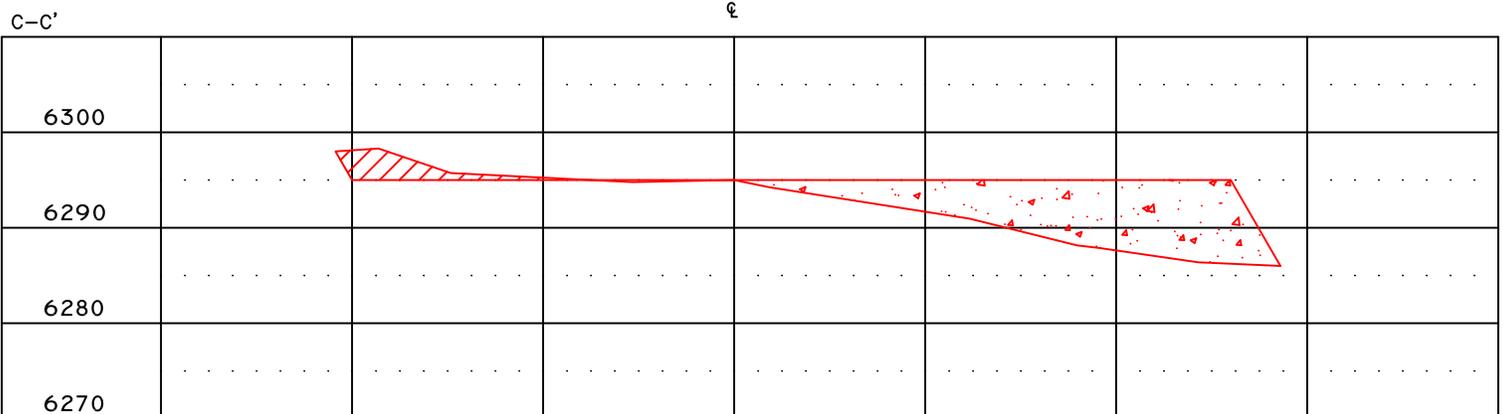
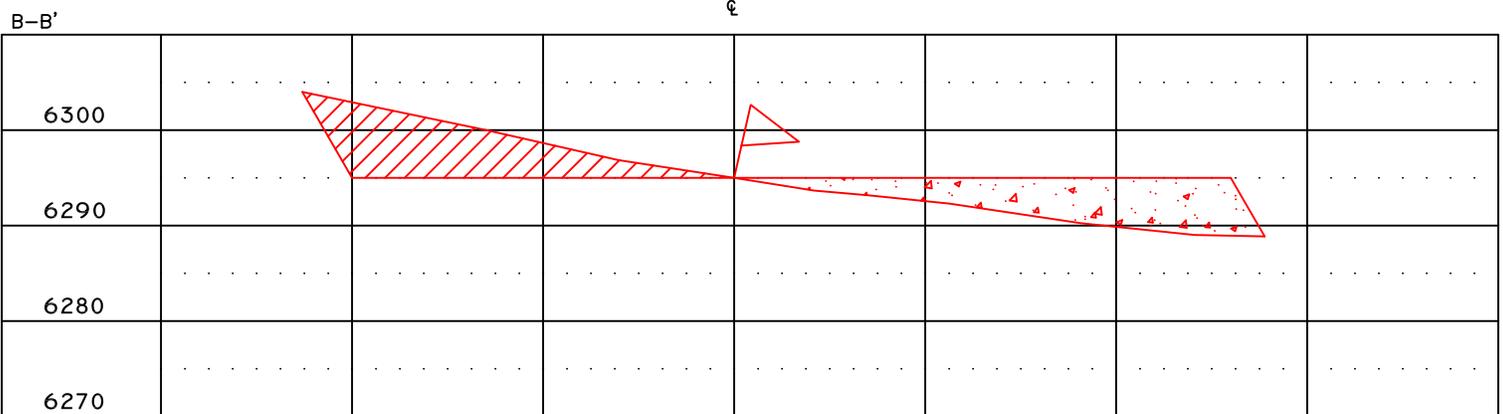
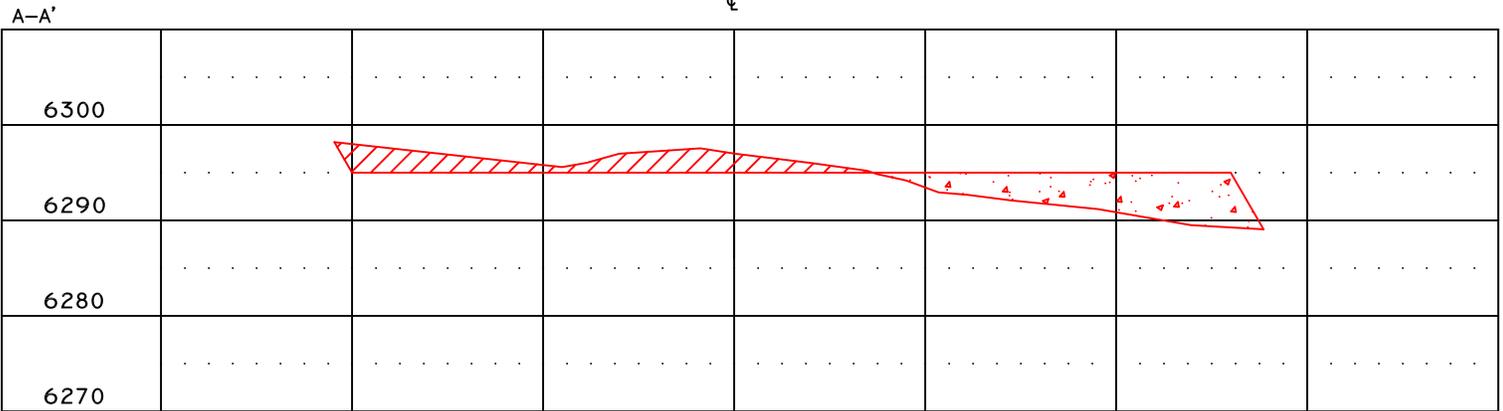
By:   
Andy Wetherell, Energy Manager  
Southern Ute Department of Energy

Date: 5-23-2023

# HILCORP SAN JUAN, L.P.

SOUTHERN UTE 701H - 211' FNL & 1404' FEL (SURFACE) IN SECTION 22,  
 1930' FSL & 710' FEL (BOTTOM HOLE) IN SECTION 14,  
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO  
 GROUND ELEVATION: 6295 - DATE: MARCH 20, 2012

ELEVATION



1" = 50' - HORIZONTAL  
 1" = 20' - VERTICAL

**NOTES:**

- 1.) CONTRACTOR SHALL CONTACT "ONE-CALL" FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES OR CABLES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.
- 2.) UNITED FIELD SERVICES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.



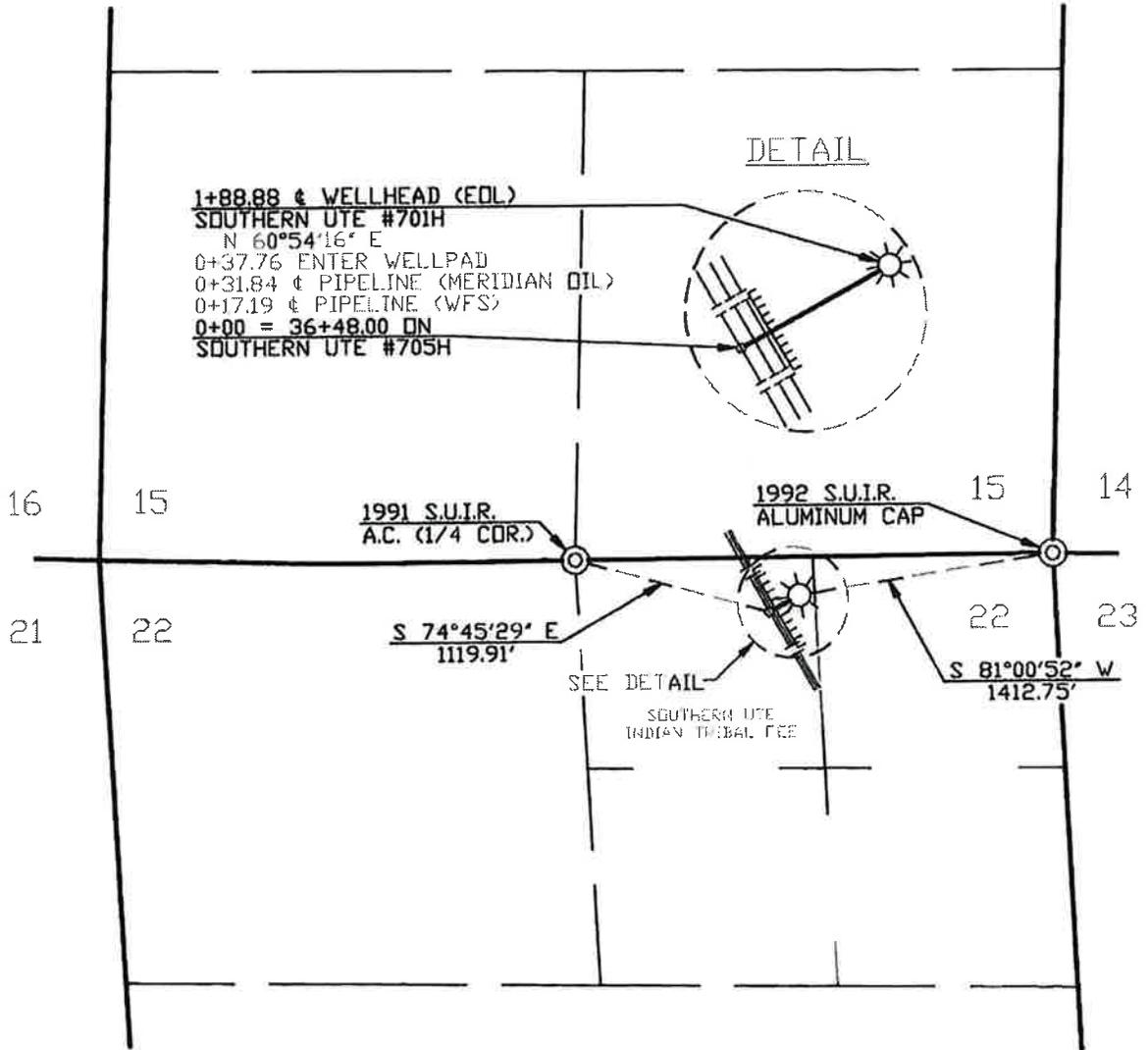
P.O. BOX 3651  
 FARMINGTON, NM 87499  
 OFFICE: (505) 334-0408

DWG. NO. : 11732C01		REVISION: 1
DRAWN BY: K.S.	DATE DRAWN: 03/01/23	REV. DATE:
SURVEYED: 03/20/12	APP. BY: J.A.V.	

SHEET F

**WELL PLAT  
FOOTAGES:**  
211' FNL  
1404' FEL  
DATE: 01-17-14

NETED BEARINGS ARE BASED ON THE COORDINATE SYSTEM,  
SOUTH ZONE, MAG. BEARING, THE NORTH LINE OF THE NE 1/4 OF  
SECTION 22, T-32-N, R-7-W, NMPM  
BEARS S 89°36'28" W - 2641.02'



**PRELIMINARY  
DRAWING**

PIPE DATA

OWNERSHIP	SUBDIVISION	OWNER	FEET	MILES	ACRES	RODS	R.O.V. WIDTH
	0+00 TO 1+88.88	SOUTHERN UTE INDIAN TRIBAL FEE	188.88	0.036	0.173	11.447	40'

REVISION	NO.	DATE	BY	DESCRIPTION	W.D.NO.	CHK.	APP.	NO.	DATE	BY	DESCRIPTION	W.D.NO.	CHK.	APP.
2	03/12/14	KS		LINE CHANGE (2/24/14)	WDC1154159	MW								
1	01/23/08	LB		ISSUED FOR REVIEW		PB		3	08/14/14	MW	REVISED OWNERSHIP	WDC1154159	MW	

INFO	DRAFTING	BY	DATE	STATE: COLORADO	<b>HARVEST FOUR CORNERS</b> SAN JUAN GATHERING SYSTEM BROG - SOUTHERN UTE #701H (REF DWG. 28N765.0-21-1) SEC. 22, T-32-N, R-7-W, NMPM 0+00 = 36+48.00 DN SOUTHERN UTE #705H	
R/W #:	07063	DRAWN BY	LB	01/23/08		COUNTY: LA PLATA
NWC #:		CHECKED BY	PB	01/28/08		
METER #:		APPROVED BY				
SURVEYED:	12/04/07	ENGINEER	BY	DATE		
		DESIGNED BY			SCALE: 1" = 1000'	
		PROJ. APPROVED			W.D. NO. WDC1154159	

DWG NO. 28N765.0-18-1

SHEET	REV
1	3
OF	
1	

T:\DS\MAPPING\DRAWINGS\SAN JUAN\765\00\28N7650-18-1\_R03.DWG 08/14/2014 3:00PM HARV

**SHEET E**

Hilcorp San Juan, L.P.  
Southern Ute 701H - 211' FNL & 1404' FEL (Surface) in Section 22,  
1930' FSL & 710' FEL (Bottom Hole) in Section 14,  
T-32-N, R-7-W, N.M.P.M., La Plata County, CO.



Looking North



Looking East



Looking South



Looking West



Access at Well Location



Access at Road



## **Surface Use Plan of Operations for Southern Ute 701H**

The following is required information concerning the possible effect, which the Southern Ute 701H project may have on the environment, existing road sites, and surrounding acreage. A copy will be posted on the derrick floor so all contractors and sub-contractors will be aware of all items on this plan.

Infrastructure proposed to be constructed, operated, subsequently interim reclaimed, and eventually fully reclaimed as part of the Southern Ute 701H project entails one (1) well pad with production facilities and construction buffer zone, one (1) access road, and one (1) gas pipeline. The proposed project would be built per grant of right-of-way (ROW) and Surface Use Agreement (SUA) by and between Hilcorp the Southern Ute Indian Tribe. The Southern Ute 701H well pad and road are on both SUIIT tribal fee lands and Tribal trust lands. The pipeline to take gas from the Southern Ute 701H well is on SUIIT tribal fee lands. The Southern Ute 701H well would be horizontally drilled, possibly produced, and eventually plugged and abandoned from the proposed well pad location. The proposed well would access Tribal minerals in lease number 14-20-151-6.

**Surface Hole Location:** 211' FNL & 1404' FEL,  
Unit Letter B (NWNE) Sec. 22, T32N, R7W  
La Plata County, Colorado

**First Take Point:** 1485' FSL & 721' FWL  
UL M (SWSW), Sec. 14, T32N, R7W  
La Plata County, Colorado

**End of Lateral:** 1933' FSL & 708' FEL  
UL I (NESE) Sec. 14, T32N, R7W  
La Plata County, Colorado

## Table of Contents

- 1) Existing Roads
- 2) New or Reconstructed Roads
- 3) Location of Existing Wells
- 4) Location of Existing or Proposed Production Facilities
- 5) Locations and Types of Water Supply
- 6) Construction Materials
- 7) Methods for Handling Waste
- 8) Ancillary Facilities
- 9) Well Site Layout

Sheet A1 & Sheet A2 – Well Plats  
Sheet B1 – Topo Map depicting Well Site and Resource Road  
Sheet B2 – Access Road Description  
Sheet B3 – Access Road with Culvert Placement  
Sheet C – Directions to Site  
Sheet D1 - Gas Wells in Vicinity  
Sheet D2- Water Wells in Vicinity  
Sheet E – Proposed Pipeline Survey  
Sheet F – Proposed Well Site Profile  
Sheet G1 – Proposed Well Site  
Sheet G2 – Proposed Well Site - Contour Layout  
Sheet G3 – Proposed Well Site Rig Layout Diagram  
Sheet H – Water Source Map  
Sheet I – Surface Pictures Before Disturbance  
Sheet J – Existing Road Improvements

Appendix A – Revegetation Plan  
Appendix B – Road Maintenance Plan

**Note: Hilcorp has submitted communitization agreements to SUT for approval. Additionally, Hilcorp has submitted right-of-way and surface use agreement applications to SUT for the pad and road. Finally, Harvest has submitted right-of-way agreement applications for the pipeline.**

## 1) Existing Roads

- a. Existing State and County roads are shown on **Sheet B1**.
- b. Directions to the Site are provided on **Sheet C**.
- c. The existing State and County roads adjacent to the proposed well pad will be used to supply the location during operations. These existing roads are categorized as resource roads.
- d. Roads will be maintained in same or better condition as they existed prior to the commencement of operations and said maintenance will continue until final abandonment and reclamation of the well location. Maintenance would continue until final abandonment and reclamation of the well location (See **Appendix B**).
- e. Dust emissions will be controlled on the roads and location, as necessary, with the application of dust suppressants and/or water. Dust control will be implemented when dust plumes become larger than normal road use conditions or when directed by the BLM or SUIT Authorized Officer.
- f. Hilcorp has committed to upgrading a section of the access road as shown on **Sheet J**. A total of 6786' of existing roadway will be upgraded by adding 3" minus road base after twelve new culverts are installed at the locations indicated on **Sheet J**. No new topsoil will be needed to upgrade this section of road. Any soil removed from the existing roadway that is not needed during the upgrade will be incorporated into shoulder that is adjacent to and parallel with the bar-ditch.

## 2) New or Reconstructed Roads

- a. The resource road and well pad will be designed and constructed in accordance with the BLM Gold Book Standards and BLM 9113-1 (Roads Design Handbook) and BLM 9113-2 (Roads National Inventory and Condition Assessment Guidance and Instructions Handbook). Construction may include ditches, drainage, culverts, traffic turnouts, crowning and capping or sloping and dipping the roadbed to provide a well-constructed and safe road and well pad. **Appendix B** is the Road Maintenance Plan for new and reconstructed access roads and outlines the plan for road inspections, new road design and maintenance procedures.
- b. The proposed road to the well pad was identified as a Resource Road during the onsite conducted on 3/28/2023.
- c. The new resource road will be constructed per route identified on **Sheets B1, B2 and B3** of which 174.19 feet is on Tribal Fee and 497.30 feet is on Tribal Trust.

- d. Maximum width will be 30-foot overall right-of-way with a 14-foot road running surface. During drilling and subsequent operations, all equipment and vehicles will be confined to the 14-foot driving surface.
- e. There will be two 24" x 30' culverts and one cattleguard on the new access road per onsite dated 3/28/2023 (**See Sheet B3**).
- f. Topsoil removal, storage, and protection are described in detail in the Surface Reclamation Plan.
- g. No construction or routine maintenance activities would be performed during periods when the soil is too wet to adequately support construction equipment. If equipment creates ruts deeper than six inches (6"), the soil would be deemed too wet for construction or maintenance.
- h. Hilcorp will be responsible for road maintenance from the beginning of construction to completion of operations and the well is plugged and abandoned. See attached Road Maintenance Plan (**Appendix B**).
- i. Dust emissions will be controlled on the roads and locations, related to Hilcorp activity, with the application of dust suppressants and/or water. Dust control will be implemented when dust plumes become larger than normal road use conditions or when directed by the BLM or SUIT Authorized Officer.
- j. The proposed resource road will not be constructed to all weather standards prior to drilling and completing the proposed well. If the well proves to require year-round traffic due to increased production, Hilcorp will schedule a meeting with the BLM and SUIT to discuss which portions of the roads (proposed resource road and existing resource roads) may require upgrades and/or surfacing to prevent soil erosion.
- k. As determined during the onsite on 3/28/2023, the following Best Management Practices will be implemented:
  - i. Drainage and ditch design; will line ditches with rock around corners and slopes.
  - ii. Hilcorp has committed to upgrading a section of the access road. **See Sheet J** for details of the upgrades and a map depicting the upgraded area.

### 3) Location of Existing Wells

Water wells and oil and gas wells (plugged and abandoned, active, and proposed) within a 1-mile radius of the proposed Southern Ute 701H area are depicted in **Sheet D1 and D2**. There are 16 water wells and 32 oil and gas wells (plugged and abandoned, active, or proposed) within a 1-mile radius of the proposed well pad location.

- a. Adjacent producing and plugged and abandon oil and gas wells are shown on **Sheet D1**.
- b. Adjacent water wells are shown on **Sheet D2**.

### 4) Location of Existing and/or Proposed Production Facilities

Hilcorp elects to defer providing the BLM with the well layout of production equipment (site security diagram) per Onshore Order 1 Section VIII. Hilcorp will provide the well layout of production equipment using the Notice of Intent (NOI) once the post completion facility set onsite has been conducted with the BLM's Environmental Protection Staff. The site security diagram will be provided after the well has been completed and facilities have been set. The typical well producing into this formation has the following production facilities.

- i. Two 80 BBL Produced Water Tanks
  - ii. Separator
  - iii. Production pit
  - iv. Pumping unit
  - v. Meter House
  - vi. Compressor
- b. Harvest will be the gas transporter for this well. A 4-1/2" OD buried steel pipeline that is approx. 188.88' in length of which all is on Southern Ute Tribal Fee. Harvest has applied for right-of-way with the Southern Ute Tribe for this right-of-way. Please refer to **Sheet E** for additional information on the pipeline.
  - c. Any production equipment encompassed by a dirt berm or one in which fluids are present shall be adequately fenced and properly maintained in order to safeguard both livestock and wildlife.

## 5) Location and Types of Water Supply

- a. Water would be trucked from these sources to the proposed location (**Appendix H**).
  - i. Ignacio Water Shed - northwest  $\frac{1}{4}$  of Section 20 Township 33 North, Range 7 West, Permit Number (SJ-206)
  - ii. Self-water hole- northeast  $\frac{1}{4}$  Section 7 Township 32 North, Range 6 West, Permit Number (SD 02964 2A)
  - iii. Faverino water hole- northwest  $\frac{1}{4}$  of Section 7 Township 32 North, Range 6 West, Permit Number (SJ-17)

## 6) Construction Material and Methods

- a. Construction material will be obtained from the location site; any additional fill dirt that would be used during construction for the berms around production tanks and for the padding for pipe as well as the gravel to use on the berms and around production facilities will come from one of the companies listed below. The construction material that will be brought in could be  $\frac{3}{4}$ -inch rock or  $\frac{3}{4}$ -inch road base and clean fill dirt.
  - Sky Ute Sand and Gravel
  - Crossfire Aggregate Services
  - La Boca Gravel Pit
  - Permitted BLM Sandstone Pits for Road Surface Material
- b. Any trees larger than 3-inches in diameter will be cut within 12” of ground level and delimbed. Wood permits will be obtained from the SUIT. Wood will be cut and hauled to the Southern Ute wood yard. Stumps will be cut as closed as the ground as possible. Stumps and root balls will be hauled off or ground up and then put in the fill. Any trees smaller than 3-inches in diameter with slash and brush will be chipped, shredded or mulched and incorporated into the topsoil for later use in interim reclamation. Remaining brush will be brush-hogged or scalped at ground-level prior to ground disturbance.
- c. After removal of vegetation, topsoil will be segregated and windrowed along the edge of the resource road and stockpiled within the TUA and construction zone as indicated on **Sheets G1 and G2**. Topsoil will be defined as the top six (6) inches of soil. The stockpile topsoil will be free of brush and tree limbs, trunks and root balls, but may include chipped or mulched material so long as it is incorporated into the topsoil stockpile.

- i. Topsoil will not be stripped when soils are moisture-saturated or frozen below the stripping depth.
  - ii. Topsoil stacked and waddles will be placed around the base of the topsoil. Vehicle/equipment traffic will be prevented from crossing topsoil stockpiles.
  - iii. If the well pad becomes prone to wind or water erosion, Hilcorp will take appropriate measures to prevent topsoil loss from wind. Such measures may include using tackifiers or water to wet the topsoil stockpile so that a crust is created across the exposed soil to prevent soil loss.
- d. For well pad cut and fill see **Sheet F**.
- e. As determined during the onsite on 3/28/2023, the following best Management practices will be implemented.
  - i. Line ditches with rock as needed to avoid erosion.
  - ii. Topsoil will be stacked and waddles will be placed around the base of the topsoil pile.
  - iii. Use waddles as needed around fill slopes.
  - iv. Utilize a closed loop system during drilling and completion.
  - v. Subsoil will be used as needed for fill material.
- f. Construction equipment may include chain saws, brush hog, scraper, maintainer, excavator, hydraulic mulcher, chipper and dozer. Construction of the resource road and well pad will take approximately 2 to 4 weeks.
- g. Construction contractors will utilize the Colorado 811 system to identify the location of any marked or unmarked pipelines or cables located in the proximity of the proposed resource road and well pad at least two working days prior to ground disturbance.
- h. All operations will be conducted in such a manner that full compliance is made with the applicable laws and regulations, the Application to Permit to Drill (APD), and applicable Notice (s) to Lessees.

## 7) Methods for Handling Waste

The Southern Ute 701H Project horizontal natural gas well will be drilled, and waste handled by the methods outlined below.

- a. Cuttings
  - i. Drilling operations would utilize a closed-loop system. Drilling of the horizontal lateral would be accomplished with water-based mud. All cuttings would be placed in roll-off bins and hauled to a commercial disposal facility or land farm. Hilcorp would follow Onshore Oil and Gas Order No. 1 regarding the placement, operation, and removal of closed-loop systems. No blow pit would be used.
  - ii. Closed-loop tanks would be adequately sized for containment of all fluids.
- b. Drilling Fluids
  - i. Drilling fluids would be stored onsite in above-ground storage tanks. Upon termination of drilling operations, the drilling fluids would be recycled and transferred to other permitted closed-loop systems or disposed of at one of the locations specified below in part G.
- c. Spills
  - i. Any spills of non-freshwater fluids would be immediately cleaned up and removed to an approved disposal site.
- d. Sewage
  - i. Portable toilets would be provided and maintained as needed during construction.
- e. Garbage and other waste material
  - i. All garbage and trash would be placed in an enclosed metal trash containment. The trash and garbage would be hauled off site and dumped in an approved landfill, as needed.
- f. Hazardous Waste
  - i. No chemicals subject to reporting under Superfund Amendments and Reauthorization Act Title III in an amount equal to or greater than 10,000 pounds would be used, produced, stored, transported, or disposed of

annually in association with the drilling, testing, or completing of these wells.

- ii. No extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities would be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of these wells.
- iii. All fluids (i.e., scrubber cleaners) used during washing of production equipment would be properly disposed of to avoid ground contamination or hazard to livestock or wildlife.

g. Produced Water

- i. Hilcorp would dispose of produced water from the Southern Ute 701H Project well at the following facility:
  - 1. San Juan 32-7 Unit 301 SWD, API 30-045-28549, operated by Hilcorp Energy Company, located in the Southwest ¼ of the Southwest ¼ Section 34, Township 32 North, Range 7 West.
- ii. Produced water would be transported via trucking. Some produced water may also be used in future drilling and completion operations as an alternative disposal method.

## 8) Ancillary Facilities

Any existing Hilcorp locations may be used for staging during construction, drilling, and completion operations. Standard drilling operation equipment that will be on location includes drilling rig with associated equipment, temporary trailers equipped with sleeping quarters necessary for company personnel, toilet facilities, and trash containers.

## 9) Well Site Layout for Drilling and Completion

- a. The proposed drill pad layout is shown on **Sheet G1 and G2 and Sheet G3 (rig layout)**. Cross sections have been drafted to visualize the planned cuts and fill across the location – see **Sheet F**. Refer to Section 6 for construction materials and methods.
- b. Office trailers equipped with living quarters will be provided on location during drilling and completion operations.

**10) Plans for Surface Restoration.**

- a. During reclamation activities, Seed Mix 1 has been selected from the Southern Ute seed mixes, **see Appendix A** for detailed reclamation.
- b. See **Appendix A** for details of interim and final reclamation.

**11) Other Information.**

- a. Construction contractors would call Colorado One-Call (or equivalent) to identify the location of any marked or unmarked pipelines or cables located in proximity to the proposed Southern Ute 701H Project or any other areas proposed to have ground disturbance at least two working days prior to ground disturbance.
- b. The cultural survey report was submitted to the appropriate surface managing agencies. Cultural mitigation would occur if any is listed in the approved APD.
- c. All activities associated with the construction, use/operation, maintenance, and abandonment or termination of the Southern Ute 701H Project well would be limited to areas approved in the APD(s).

**APD ID:** 10400091340

**Submission Date:** 04/18/2023

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Well Type:** COALBED NATURAL GAS WELL

**Well Work Type:** Drill

## Section 1 - General

Would you like to address long-term produced water disposal? NO

## Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Lined pit PWD on or off channel:**

**Lined pit PWD discharge volume (bbl/day):**

**Lined pit**

**Pit liner description:**

**Pit liner manufacturers**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal**

**Lined pit precipitated solids disposal schedule:**

**Lined pit precipitated solids disposal schedule**

**Lined pit reclamation description:**

**Lined pit reclamation**

**Leak detection system description:**

**Leak detection system**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Lined pit Monitor description:**

**Lined pit Monitor**

**Lined pit: do you have a reclamation bond for the pit?**

**Is the reclamation bond a rider under the BLM bond?**

**Lined pit bond number:**

**Lined pit bond amount:**

**Additional bond information**

### Section 3 - Unlined

**Would you like to utilize Unlined Pit PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD disturbance (acres):**

**PWD surface owner:**

**Unlined pit PWD on or off channel:**

**Unlined pit PWD discharge volume (bbl/day):**

**Unlined pit**

**Precipitated solids disposal:**

**Describe precipitated solids disposal:**

**Precipitated solids disposal**

**Unlined pit precipitated solids disposal schedule:**

**Unlined pit precipitated solids disposal schedule**

**Unlined pit reclamation description:**

**Unlined pit reclamation**

**Unlined pit Monitor description:**

**Unlined pit Monitor**

**Do you propose to put the produced water to beneficial use?**

**Beneficial use user**

**Estimated depth of the shallowest aquifer (feet):**

**Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?**

**TDS lab results:**

**Geologic and hydrologic**

**State**

**Unlined Produced Water Pit Estimated**

**Unlined pit: do you have a reclamation bond for the pit?**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Is the reclamation bond a rider under the BLM bond?**

**Unlined pit bond number:**

**Unlined pit bond amount:**

**Additional bond information**

### Section 4 -

**Would you like to utilize Injection PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Injection PWD discharge volume (bbl/day):**

**Injection well mineral owner:**

**Injection well type:**

**Injection well number:**

**Injection well name:**

**Assigned injection well API number?**

**Injection well API number:**

**Injection well new surface disturbance (acres):**

**Minerals protection information:**

**Mineral protection**

**Underground Injection Control (UIC) Permit?**

**UIC Permit**

### Section 5 - Surface

**Would you like to utilize Surface Discharge PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Surface discharge PWD discharge volume (bbl/day):**

**Surface Discharge NPDES Permit?**

**Surface Discharge NPDES Permit attachment:**

**Surface Discharge site facilities information:**

**Surface discharge site facilities map:**

### Section 6 -

**Would you like to utilize Other PWD options?** N

**Produced Water Disposal (PWD) Location:**

**PWD surface owner:**

**PWD disturbance (acres):**

**Other PWD discharge volume (bbl/day):**

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Other PWD type description:**

**Other PWD type**

**Have other regulatory requirements been met?**

**Other regulatory requirements**



**APD ID:** 10400091340

**Submission Date:** 04/18/2023

**Operator Name:** HILCORP ENERGY COMPANY

**Well Name:** SOUTHERN UTE

**Well Number:** 701H

**Well Type:** COALBED NATURAL GAS WELL

**Well Work Type:** Drill

Highlighted data  
reflects the most  
recent changes  
[Show Final Text](#)

## Bond

**Federal/Indian APD:** IND

**BLM Bond number:**

**BIA Bond number:** SUR0042314

**Do you have a reclamation bond?** NO

**Is the reclamation bond a rider under the BLM bond?**

**Is the reclamation bond BLM or Forest Service?**

**BLM reclamation bond number:**

**Forest Service reclamation bond number:**

**Forest Service reclamation bond**

**Reclamation bond number:**

**Reclamation bond amount:**

**Reclamation bond rider amount:**

**Additional reclamation bond information**