

Well Name: SOUTHERN UTE

Well Location: T32N / R07W / SEC 19 /
LOT 6 / 37.0008784 / -107.6430198

County or Parish/State: LA
PLATA / CO

Well Number: 706H

Type of Well: COALBED NATURAL
GAS WELL

Allottee or Tribe Name:
SOUTHERN UTE

Lease Number: 14201515

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: HILCORP ENERGY
COMPANY

Notice of Intent

Sundry ID: 2834429

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/29/2025

Time Sundry Submitted: 01:06

Date proposed operation will begin: 04/01/2025

Procedure Description: Hilcorp Energy Company requests to revise the drilling plan by shortening the lateral. Please see the attached revised plat, technical plan and directional plans.

NOI Attachments

Procedure Description

Southern_Ute_706H__cert_6_10_24__20250129130640.pdf

Southern_Ute_706H___Drilling_Technical_Plan___Rev_3_20250129130632.pdf

Southern_Ute_706H_Revised_Directional_Plan_20250129130631.pdf

Southern_Ute_706H_REVISED_WBD_20250129130631.pdf

Well Name: SOUTHERN UTE

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LOT 6 / 37.0008784 / -107.6430198

County or Parish/State: LA
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Well Number: 706H

Type of Well: COALBED NATURAL
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SOUTHERN UTE

Lease Number: 14201515

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: HILCORP ENERGY
COMPANY

Conditions of Approval

Authorized

coa_apd_change_2834429_20250213081100.pdf

Operator

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: AMANDA WALKER

Signed on: JAN 29, 2025 01:06 PM

Name: HILCORP ENERGY COMPANY

Title: Operations/Regulatory Technician

Street Address: 1111 TRAVIS ST

City: HOUSTON

State: TX

Phone: (346) 237-2177

Email address: MWALKER@HILCORP.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: JOE D KILLINS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 9703851363

BLM POC Email Address: JKILLINS@BLM.GOV

Disposition: Approved

Disposition Date: 02/13/2025

Signature: Joe Killins

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice 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.	Office	

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.

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law 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, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. 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 the 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., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

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

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

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 Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: LOT 6 / 350 FSL / 499 FEL / TWSP: 32N / RANGE: 07W / SECTION: 19 / LAT: 37.0008784 / LONG: -107.6430198 (TVD: 0 feet, MD: 0 feet)
PPP: LOT 6 / 350 FSL / 499 FEL / TWSP: 32N / RANGE: 07W / SECTION: 19 / LAT: 37.0008784 / LONG: -107.6430198 (TVD: 3836 feet, MD: 5046 feet)
BHL: SWNW / 1810 FNL / 940 FWL / TWSP: 32N / RANGE: 07W / SECTION: 20 / LAT: 37.0053142 / LONG: -107.6282734 (TVD: 3836 feet, MD: 5046 feet)
BHL: NENW / 651 FNL / 2003 FEL / TWSP: 32N / RANGE: 07W / SECTION: 21 / LAT: 37.0078479 / LONG: -107.6163841 (TVD: 3760 feet, MD: 11387 feet)
PPP: NWNE / 849 FNL / 0 FWL / TWSP: 32N / RANGE: 07W / SECTION: 20 / LAT: 37.0047673 / LONG: -107.6388573 (TVD: 3760 feet, MD: 11387 feet)
PPP: SWNW / 1009 FNL / 723 FWL / TWSP: 32N / RANGE: 07W / SECTION: 20 / LAT: 37.0046886 / LONG: -107.6389429 (TVD: 3796 feet, MD: 4715 feet)
BHL: SENW / 1751 FNL / 2013 FWL / TWSP: 32N / RANGE: 07W / SECTION: 21 / LAT: 37.0048252 / LONG: -107.6161601 (TVD: 3764 feet, MD: 11631 feet)

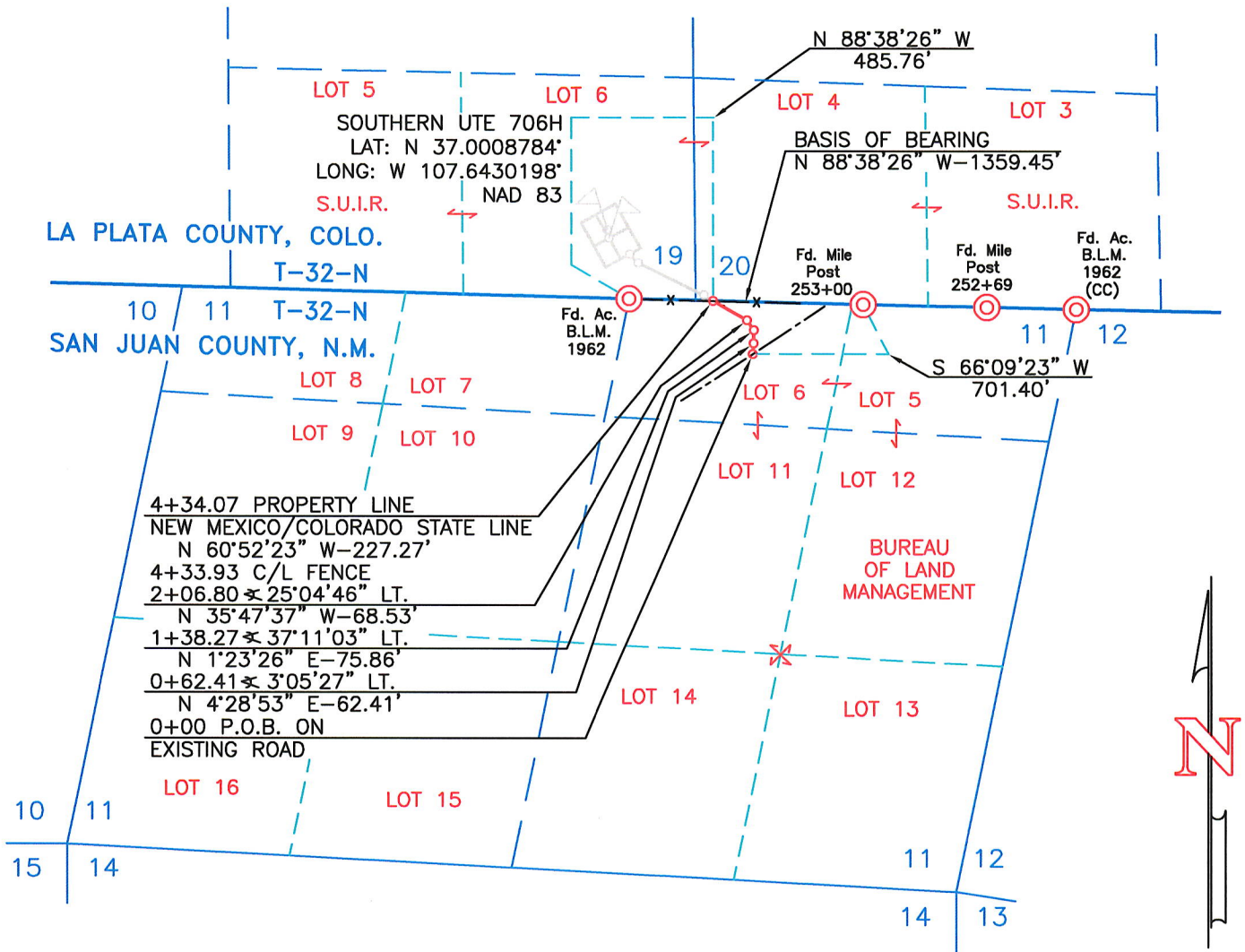
CONFIDENTIAL

HILCORP SAN JUAN, L.P.

SOUTHERN UTE 706H PROPOSED ACCESS ROAD

NE 1/4 SEC. II, T-32-N, R-8-W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO




- NOTES:**
1. BASIS OF BEARING: AS MEASURED BETWEEN MP 253+00 AND THE NORTH 1/4 CORNER OF SECTION 11, T-32-N, R-8-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO.
BEARS: N 88°38'26" W - 1359.45'
 2. ALL BEARINGS & DISTANCES SHOWN ARE BASED UPON THE COLORADO COORDINATE SYSTEM, SOUTH ZONE, NAD 83.

P.O.B. = POINT OF BEGINNING

0 500 1000
SCALE: 1"=1000'

OWNER	STATION	FEET/RODS
BUREAU OF LAND MANAGEMENT	0+00 TO 4+34.07	434.07/26.307

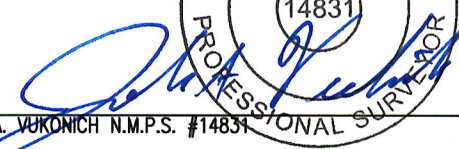
HILCORP SAN JUAN, L.P.



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

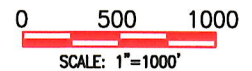
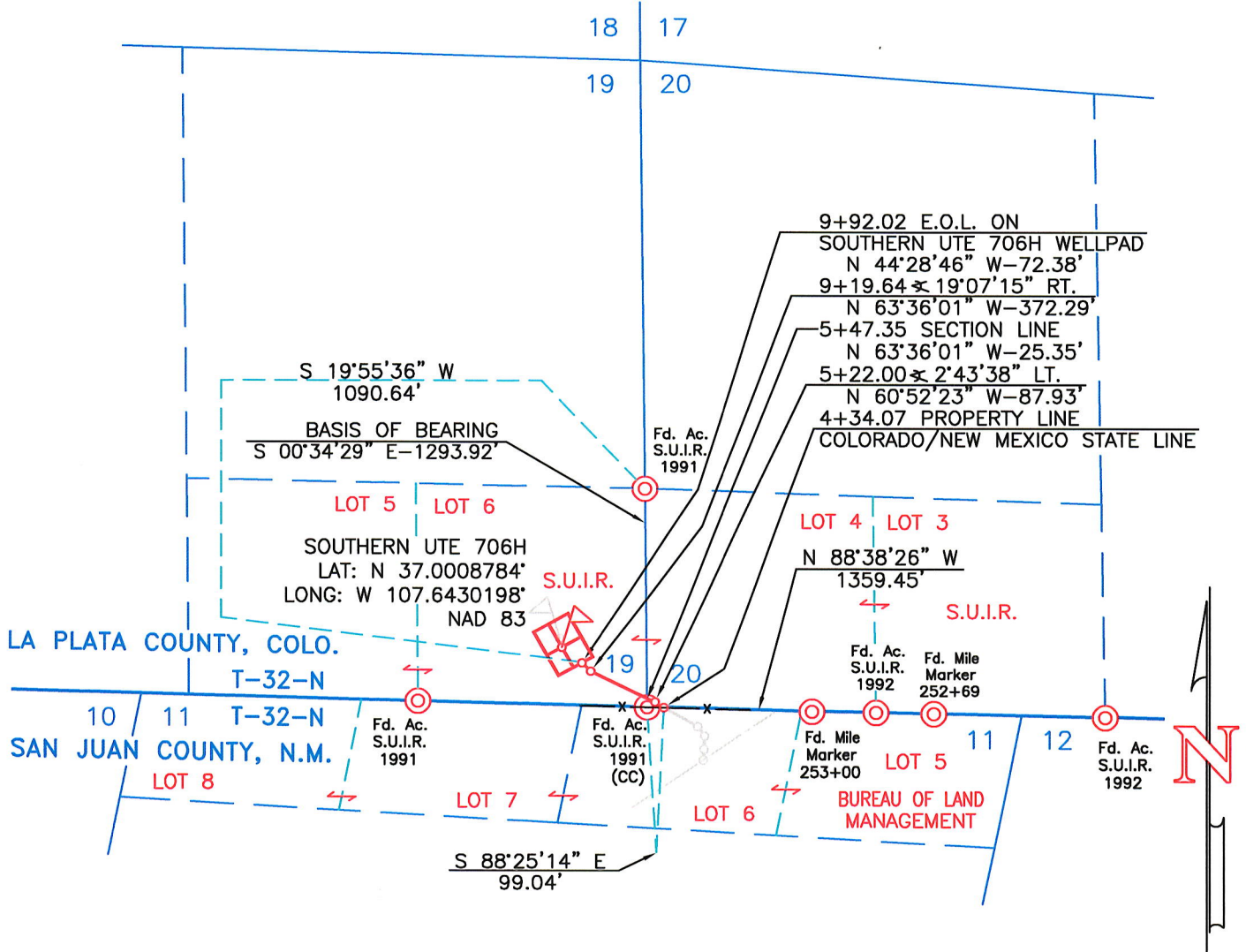
DWG. NO. : 11737A04	REVISION: 1
DRAWN BY: C.B.	DATE DRAWN: 09/25/23
SURVEYED: 09/22/23	APP. BY: J.A.V.
	REV. DATE:
	SHEET: 1

I, JOHN A. VUKONICH, NEW MEXICO PROFESSIONAL SURVEYOR NO. 14831, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER CERTIFY THAT THIS SURVEY IS NOT A LAND DIVISION OR SUBDIVISION AS DEFINED IN THE NEW MEXICO


 JOHN A. VUKONICH N.M.P.S. #14831 DATE 10/6/2023

HILCORP SAN JUAN, L.P.

SOUTHERN UTE 706H PROPOSED ACCESS ROAD THE SW 1/4 OF SEC. 20 AND THE SE 1/4 OF SEC. 19, T-32-N, R-7-W, N.M.P.M. LA PLATA COUNTY, COLORADO

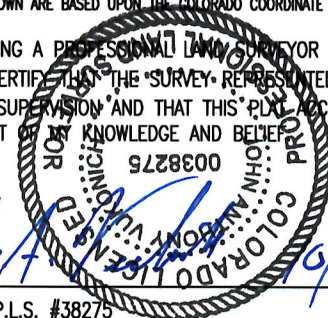


E.O.L. = END OF LINE

NOTES:

1. BASIS OF BEARING: MONUMENTED EAST LINE OF THE SE 1/4 OF SECTION 19, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.
BEARS: S 00°34'29" E - 1293.92'
2. ALL BEARINGS & DISTANCES SHOWN ARE BASED UPON THE COLORADO COORDINATE SYSTEM, SOUTH ZONE, NAD 83.

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 UNDER MY DIRECT SUPERVISION AND THAT THIS PLAT ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.



[Signature]
 JOHN A. VUKONICH, CO. P.L.S. #38275
 DATE 06/06/2023

OWNER	STATION	FEET/RODS
SOUTHERN UTE INDIAN RESERVATION	4+34.07 TO 9+92.02	557.95/33.815

HILCORP SAN JUAN, L.P.

 UNITED FIELD SERVICES INC.		P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505)334-0408
DWG. NO. : 11737A05		REVISION: 1
DRAWN BY: C.B.	DATE DRAWN: 09/25/23	REV. DATE:
SURVEYED: 09/22/23	APP. BY: J.A.V.	SHEET: 1

September 25, 2023

HILCORP SAN JUAN, L.P.
SOUTHERN UTE 706H PROPOSED ACCESS ROAD
LOCATED IN THE SW 1/4 OF SECTION 20 AND THE SE 1/4 OF
SECTION 19, T-32-N, R-7-W, N.M.P.M.
LA PLATA COUNTY, COLORADO

THE DESCRIPTION OF A 20 FOOT WIDE RIGHT-OF-WAY FOR A PROPOSED ACCESS ROAD LOCATED IN THE SOUTHWEST QUARTER OF SECTION 20 AND THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 32 NORTH, RANGE 7 WEST, N.M.P.M., LA PLATA COUNTY, COLORADO, BEING 10 FEET ON BOTH SIDES OF THE FOLLOWING DESCRIBED CENTERLINE:

COMMENCING AT A FOUND 1991 S.U.I.R. ALUMINUM CAP FOR THE SECTION CORNER COMMON TO SECTIONS 20 AND 19, THENCE SOUTH 88°25'14" EAST A DISTANCE OF 99.04 FEET TO THE POINT OF BEGINNING FOR THIS DESCRIPTION;

THENCE NORTH 60°52'23" WEST A DISTANCE 87.93 FEET;

THENCE NORTH 63°36'01" WEST A DISTANCE 25.35 FEET TO SECTION LINE COMMON TO SECTIONS 20 AND 19;

THENCE NORTH 63°36'01" WEST A DISTANCE 372.29 FEET;

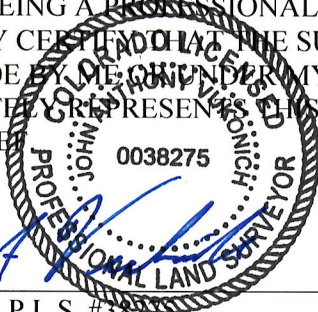
THENCE NORTH 44°28'46" WEST A DISTANCE OF 72.38 FEET TO A POINT IN SAID SOUTHEAST QUARTER OF SECTION 19. SAID POINT BEARS SOUTH 19°55'36" WEST, A DISTANCE OF 1090.64 FEET FROM A FOUND 1991 S.U.I.R. ALUMINUM CAP FOR THE QUARTER CORNER COMMON TO SECTIONS 19 AND 20.

THE TOTAL LENGTH OF THE CENTERLINE AS DESCRIBED ABOVE, IS 557.95 FEET, 33.815 RODS OR 0.106 MILE. 20 FOOT RIGHT-OF-WAY CONTAINS 0.256 ACRE, MORE OR LESS.

BASIS OF BEARING - THE MONUMENTED WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 20, T-32-N, R-7-W, N.M.P.M. LA PLATA COUNTY, COLORADO. LINE BEARS SOUTH 00°34'29" EAST A DISTANCE OF 1293.92 FEET AS MEASURED BY GPS.

SURVEYOR'S CERTIFICATION

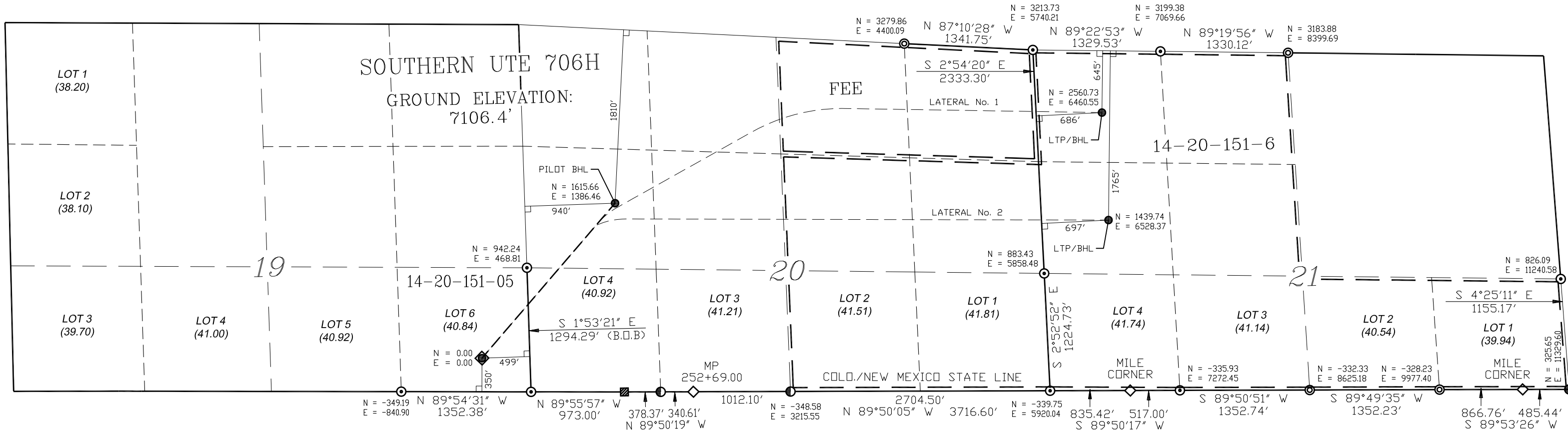
I, JOHN A. VUKONICH, BEING A PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE SURVEY REPRESENTED BY THIS DESCRIPTION WAS MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT THIS DESCRIPTION ACCURATELY REPRESENTS THIS SURVEY TO THE BEST OF MY KNOWLEDGE AND BELIEF.



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

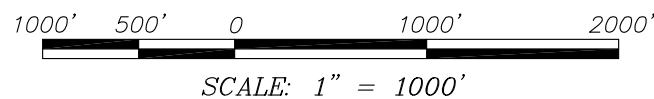
10/06/2023
DATE

HILCORP SAN JUAN, L.P.
 SOUTHERN UTE 706H – 350' FSL & 499' FEL (SURFACE) IN SECTION 19,
 1810' FNL & 940' FWL (PILOT BOTTOM HOLE) IN SECTION 20,
 645' FNL & 686' FWL (LATERAL 1 BOTTOM HOLE) IN SECTION 21,
 1765' FNL & 697' FWL (LATERAL 2 BOTTOM HOLE) IN SECTION 21,
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO
 GROUND ELEVATION: 7106.4'



<u>GEO. SURFACE VALUES</u>	<u>GEO. PILOT BOTTOM HOLE VALUES</u>	<u>GEO. LATERAL No. 1 BOTTOM HOLE VALUES</u>	<u>GEO. LATERAL No. 2 BOTTOM HOLE VALUES</u>
<u>LATITUDE (NAD 83)</u> NORTH 37.0008784°	<u>LATITUDE (NAD 83)</u> NORTH 37.0053142°	<u>LATITUDE (NAD 83)</u> NORTH 37.0079070°	<u>LATITUDE (NAD 83)</u> NORTH 37.0048291°
<u>LONGITUDE (NAD 83)</u> WEST 107.6430198°	<u>LONGITUDE (NAD 83)</u> WEST 107.6382734°	<u>LONGITUDE (NAD 83)</u> WEST 107.6209022°	<u>LONGITUDE (NAD 83)</u> WEST 107.6206710°

BASIS OF BEARING
 MONUMENTED WEST LINE OF THE SW 1/4 OF
 SEC. 20, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO
 BEARS: S 1°53'21" E - 1294.29'



LEGEND

- ◆ SURFACE LOCATION (SHL)
- LAST TAKE POINT/BOTTOM HOLE LOCATION (LTP/BHL)
- ⊙ 1991 S.U.I.R. ALUMINUM CAP
- ⊙ 1992 S.U.I.R. ALUMINUM CAP
- ⊙ 1991 B.L.M.
- CALCULATED POSITION
- ◇ MILE POST (252+00, 252+69.00)
- ⊠ CALCULATED POSITION (MP 253+00)
- L DENOTES 90° TIE
- (B.L.B.) BASIS OF BEARING

NOTES

1. SURFACE BEARINGS AND DISTANCES ARE SHOWN.
2. NORTHING & EASTING COORDINATES ARE REFERENCED TO LOCALIZED SYSTEM WITH THE SURFACE LOCATION DEFINED AS THE ORIGIN.
3. BEARINGS & 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

HILCORP SAN JUAN, L.P.



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

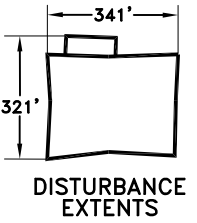
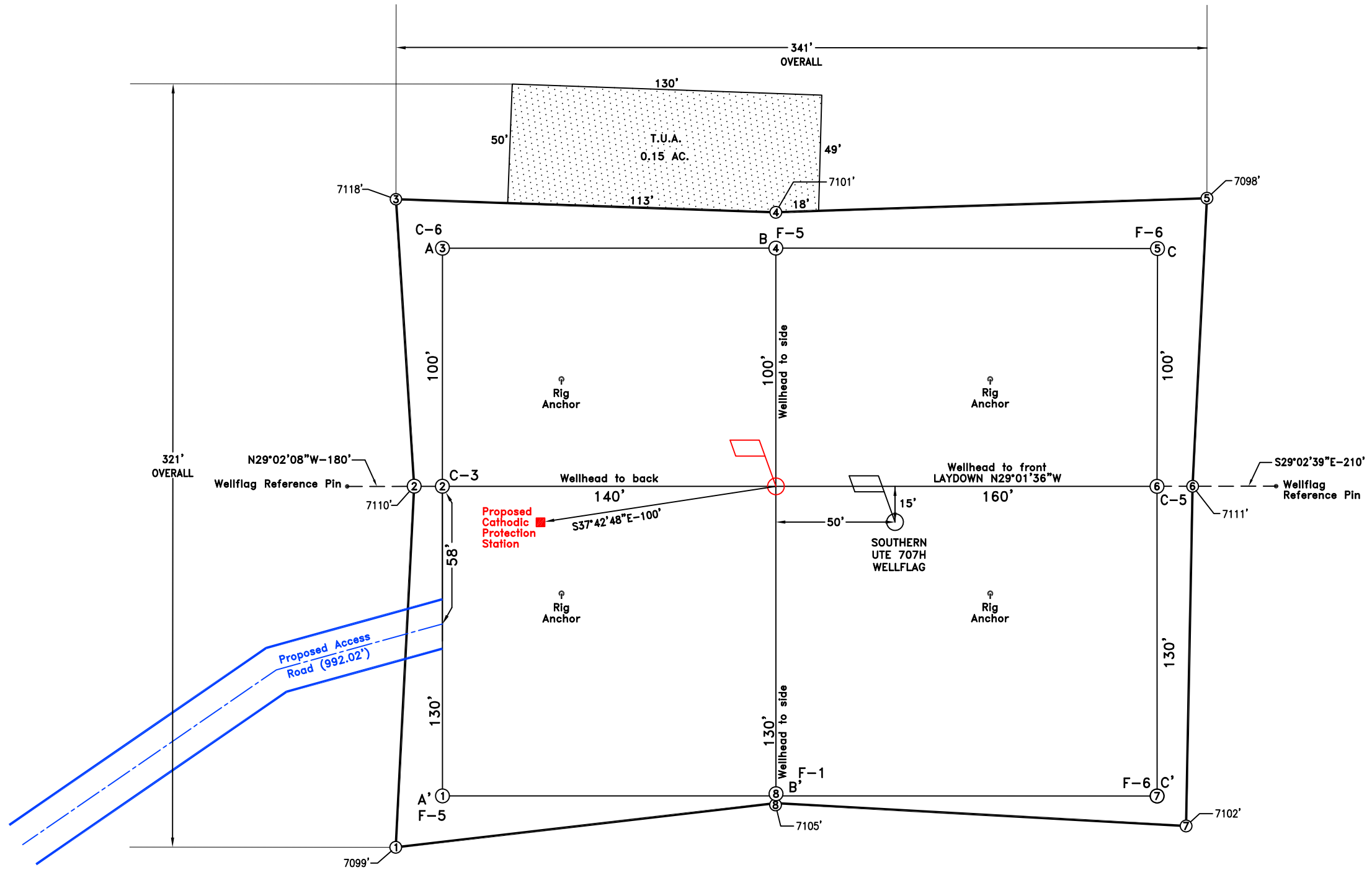
SCALE: 1"=1000' JOB No. 11737 DATE: 04/26/24

**PLAT OF DRILLING LOCATION FOR
 HILCORP SAN JUAN, L.P.
 SOUTHERN UTE 706H**
 SURFACE: 350' F/SL & 499' F/EL, SECTION 19,
 PILOT BOTTOM HOLE: 1810' F/NL & 940' F/WL, SECTION 20,
 LATERAL No. 1 BOTTOM HOLE: 645' F/NL & 686' F/WL, SECTION 21,
 LATERAL No. 2 BOTTOM HOLE: 1765' F/NL & 697' F/WL, SECTION 21,
 T. 32 N, R. 7 W, N.M.P.M.
 LA PLATA COUNTY, COLORADO

HILCORP SAN JUAN, L.P.
 SOUTHERN UTE 706H - 350' FSL & 499' FEL (SURFACE) IN SECTION 19,
 1810' FNL & 940' FWL (PILOT BOTTOM HOLE) IN SECTION 20,
 645' FNL & 686' FWL (LATERAL 1 BOTTOM HOLE) IN SECTION 21,
 1765' FNL & 697' FWL (LATERAL 2 BOTTOM HOLE) IN SECTION 21,
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO
 GROUND ELEVATION: 7106.4'

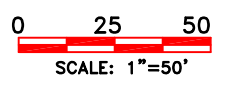
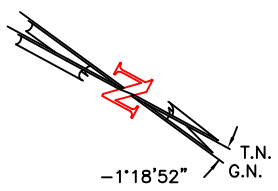
SOUTHERN UTE 706H
 LATITUDE: 37.0008784° N
 LONGITUDE: 107.6430198° W
 NAD 83
 LATITUDE: 37°00.05249' N
 LONGITUDE: 107°38.54442' W
 NAD 27

PROPOSED CATHODIC PROTECTION STATION
 LATITUDE: 37.0006651° N
 LONGITUDE: 107.6428042° W
 NAD 83
 LATITUDE: 37°00.03969' N
 LONGITUDE: 107°38.53148' W
 NAD 27



TOTAL PERMITTED AREA = 2.11 ACRE(S)
 LEVEL PAD AREA = 1.58 ACRE(S)

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



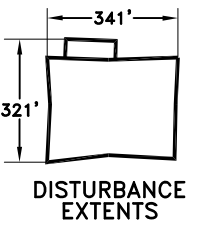
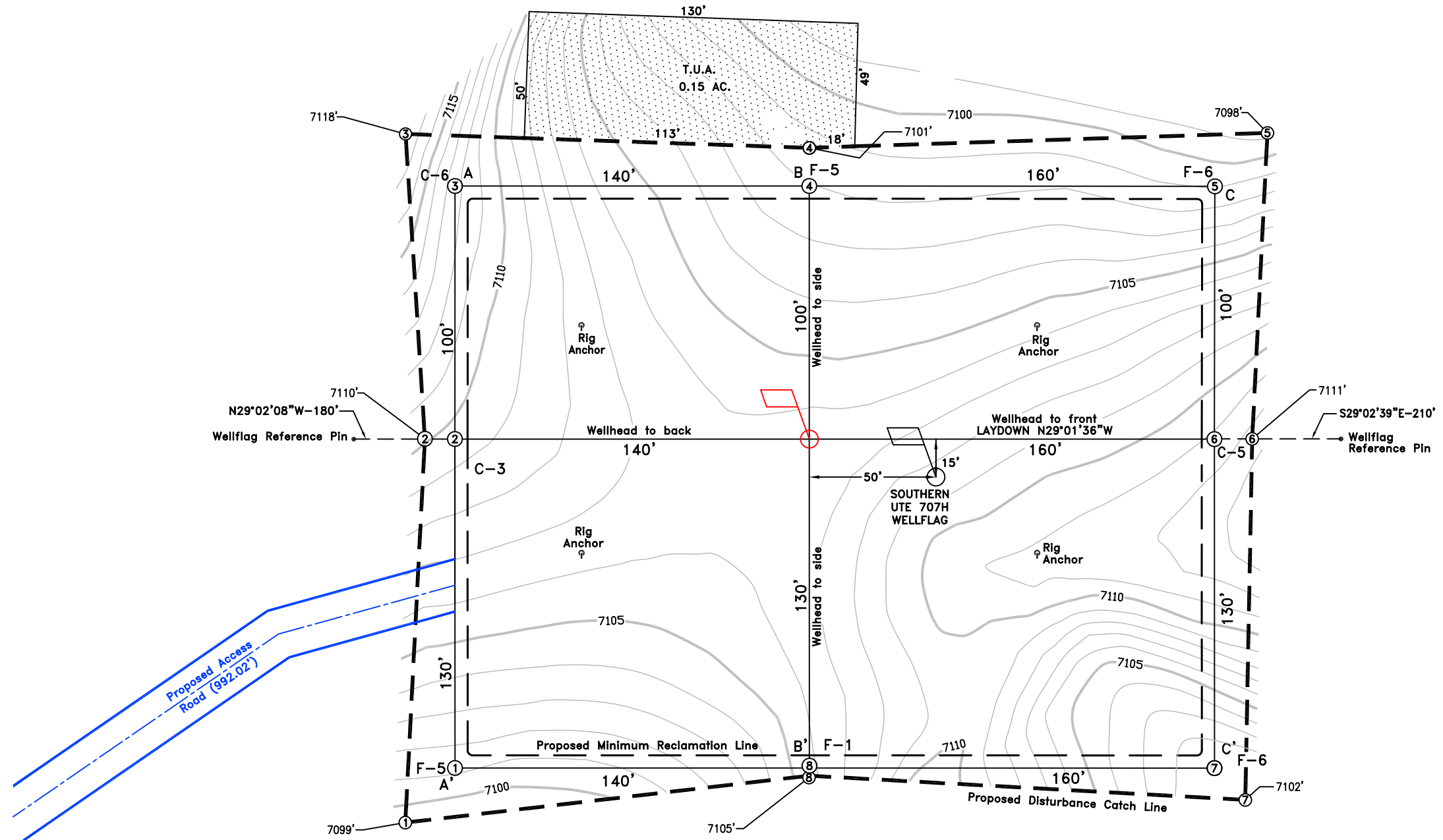
LEGEND
 T.U.A. = TEMPORARY USE AREA

- 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 AND DO NOT REPRESENT ACTUAL CONSTRUCTION STAKING.

		P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408	
DWG. NO. : 11737L07		REVISION: 2	
DRAWN BY: C.B.	DATE DRAWN: 09/25/23	REV. DATE: 04/26/24	
SURVEYED: 09/22/23	APP. BY: J.A.V.	SHEET: 1	

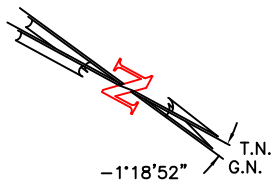
HILCORP SAN JUAN, L.P.
 SOUTHERN UTE 706H - 350' FSL & 499' FEL (SURFACE) IN SECTION 19,
 1810' FNL & 940' FWL (PILOT BOTTOM HOLE) IN SECTION 20,
 645' FNL & 686' FWL (LATERAL 1 BOTTOM HOLE) IN SECTION 21,
 1765' FNL & 697' FWL (LATERAL 2 BOTTOM HOLE) IN SECTION 21,
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO
 GROUND ELEVATION: 7106.4'

SOUTHERN UTE 706H
 LATITUDE: 37.0008784° N
 LONGITUDE: 107.6430198° W
 NAD 83
 LATITUDE: 37°00.05249' N
 LONGITUDE: 107°38.54442' W
 NAD 27



TOTAL PERMITTED AREA = 2.11 ACRE(S)
 LEVEL PAD AREA = 1.58 ACRE(S)

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



0 25 50
 SCALE: 1"=50'

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 AND DO NOT REPRESENT ACTUAL CONSTRUCTION STAKING.

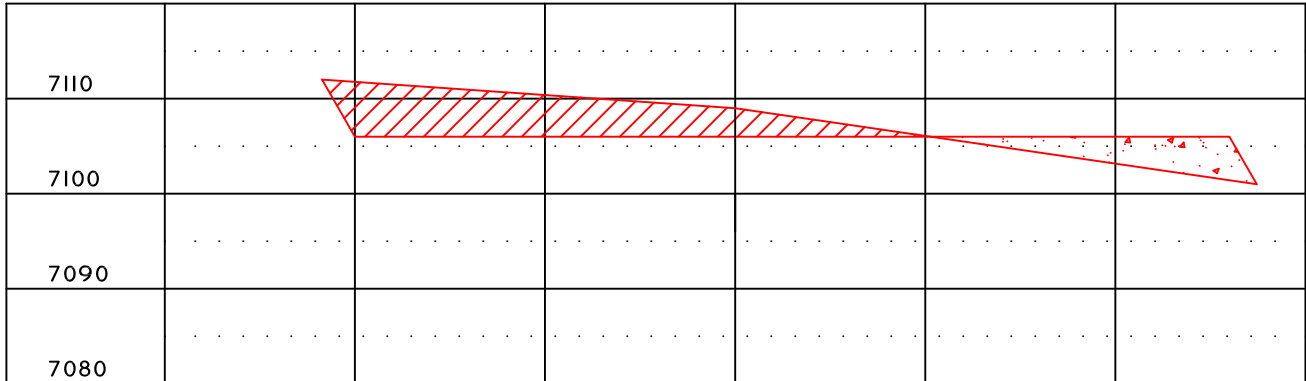
		P.O. BOX 3651 FARMINGTON, NM 87499 OFFICE: (505) 334-0408
DWG. NO. : 11737L08	DATE DRAWN: 09/25/23	REVISION: 2
DRAWN BY: C.B.	APP. BY: J.A.V.	REV. DATE: 04/26/24
SURVEYED: 09/22/23		SHEET: 1

HILCORP SAN JUAN, L.P.

SOUTHERN UTE 706H – 350’ FSL & 499’ FEL (SURFACE) IN SEC. 19,
 1810’ FNL & 940’ FWL (PILOT BOTTOM HOLE) IN SECTION 20,
 645’ FNL & 686’ FWL (LATERAL 1 BOTTOM HOLE) IN SECTION 21,
 1765’ FNL & 697’ FWL (LATERAL 2 BOTTOM HOLE) IN SECTION 21,
 T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, CO.
 GROUND ELEVATION: 7106.4 – DATE: SEPTEMBER 22, 2023

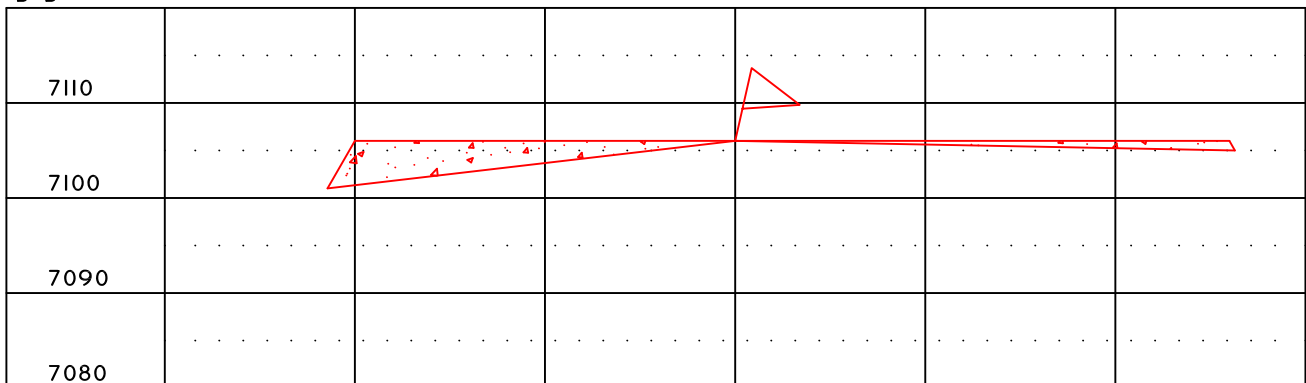
ELEVATION
A-A'

℄



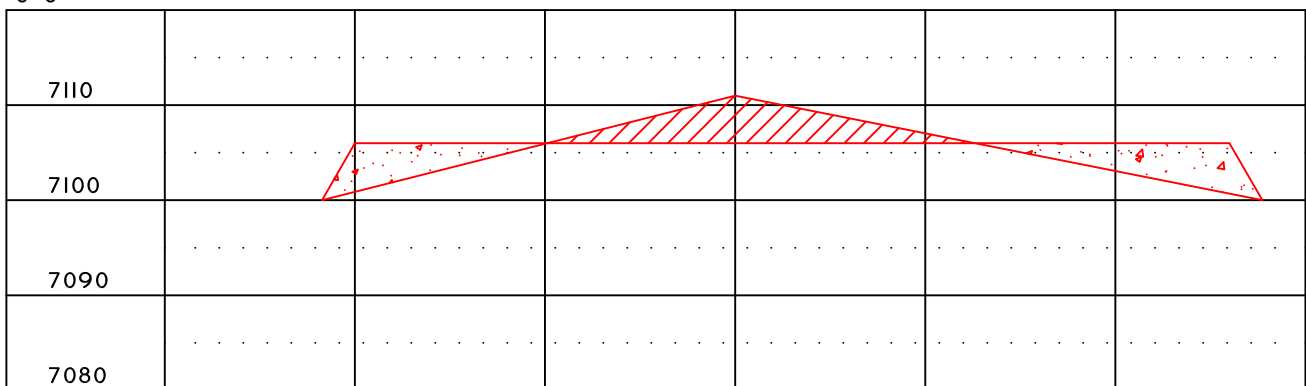
B-B'

℄



C-C'

℄



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.



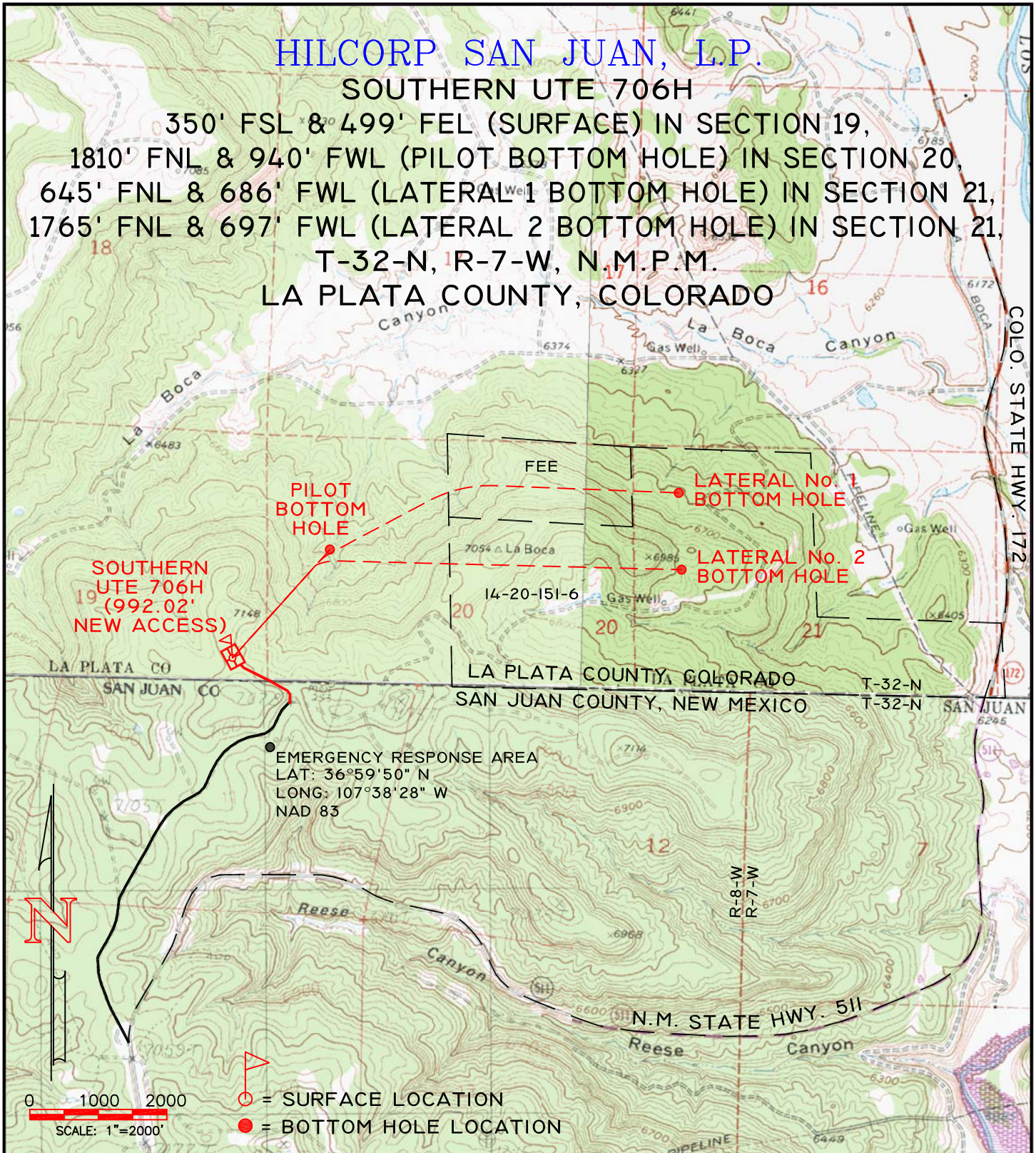
P.O. BOX 3651
 FARMINGTON, NM 87499
 OFFICE: (505) 334-0408

DWG. NO. : 11737C05		REVISION: 2
DRAWN BY: C.B.	DATE DRAWN: 09/25/23	REV. DATE: 04/26/24
SURVEYED: 09/22/23	APP. BY: J.A.V.	SHEET: 1

HILCORP SAN JUAN, L.P.

SOUTHERN UTE 706H

350' FSL & 499' FEL (SURFACE) IN SECTION 19,
 1810' FNL & 940' FWL (PILOT BOTTOM HOLE) IN SECTION 20,
 645' FNL & 686' FWL (LATERAL 1 BOTTOM HOLE) IN SECTION 21,
 1765' FNL & 697' FWL (LATERAL 2 BOTTOM HOLE) IN SECTION 21,
 T-32-N, R-7-W, N.M.P.M.
 LA PLATA COUNTY, COLORADO



PILOT
BOTTOM
HOLE

SOUTHERN
UTE 706H
(992.02'
NEW ACCESS)

FEE

LATERAL No. 1
BOTTOM HOLE

LATERAL No. 2
BOTTOM HOLE

EMERGENCY RESPONSE AREA
 LAT: 36°59'50" N
 LONG: 107°38'28" W
 NAD 83



0 1000 2000
 SCALE: 1"=2000'

○ = SURFACE LOCATION
 ● = BOTTOM HOLE LOCATION

SURFACE TYPE: SOUTHERN UTE INDIAN TRIBE
 350' FSL, 499' FEL (SURFACE) SEC. 19
 1810' FNL, 940' FWL (PILOT BHL) SEC. 20
 645' FNL, 686' FWL (LATERAL No. 1 BHL) SEC. 21
 FOOTAGES: 1765' FNL, 697' FWL (LATERAL No. 2 BHL) SEC. 21
 SEC. 19, 20 & 21 TWN. 32 N RNG. 7 W N.M.P.M.
 LAT: N 37.0008784° LONG: W 107.6430198° (NAD 83)
 ELEVATION: 7106.4

HILCORP SAN JUAN, L.P.



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

DWG. NO. : 11737T03		REVISION: 2
DRAWN BY: C.B.	DATE DRAWN: 09/25/23	REV. DATE: 04/26/24
SURVEYED: 09/22/23	APP. BY: J.A.V.	SHEET: 1

HILCORP SAN JUAN, L.P.

SOUTHERN UTE 706H

**350' FSL & 499' FEL (SURFACE) IN SECTION 19,
1810' FNL & 940' FWL (PILOT BOTTOM HOLE) IN SECTION 20,
645' FNL & 686' FWL (LATERAL No. 1 BOTTOM HOLE) IN SECTION 21,
1765' FNL & 697' FWL (LATERAL No. 2 BOTTOM HOLE) IN SECTION 21,**

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

LA PLATA COUNTY, COLORADO

LATITUDE: 37.0008784° N

LONGITUDE: 107.6430198° W

NAD 83

FROM THE INTERSECTION OF COLORADO STATE HIGHWAY 172 AND
LA PLATA COUNTY ROAD 318, SOUTH OF IGNACIO, COLORADO.

TRAVEL SOUTHEASTERLY 7.5 MILES ON COLORADO STATE HIGHWAY 172
TO COLORADO / NEW MEXICO STATE LINE.

CONTINUE SOUTHERLY, THEN WESTERLY 3.5 MILES
ON N.M. STATE HIGHWAY 511.

TURN RIGHT OFF N.M. STATE HIGHWAY 511 AND
CONTINUE NORTHERLY 0.4 MILE.

TURN RIGHT AT FORK IN ROAD AND TRAVEL NORTHEASTERLY 0.7 MILE
TO PROPOSED ACCESS ROAD ON LEFT SIDE OF ROAD LEADING TO
PROPOSED SOUTHERN UTE 706H WELL LOCATION.

Hilcorp San Juan, L.P.
Southern Ute 706H
350' FSL & 499' FEL (Surface) in Section 19,
1810' FNL & 940' FWL (Pilot Bottom Hole) in Section 20,
645' FNL & 686' FWL (Lateral No. 1 Bottom Hole) in Section 21,
1765' FNL & 697' FWL (Lateral No. 2 Bottom Hole) in Section 21,
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

Hilcorp San Juan, L.P.

WELL STAKING WORKSHEET Surveyor: United Field Services, Inc. Date: 04/26/24

Arch: WCRM Pipeline Co: Harvest Environ.: Adkins Consulting

Well Sign Latitude #: 37° 00' 03" N Longitude 107° 38' 35" W (NAD 83)

Lease #: _____

Well Name: SOUTHERN UTE 706H Formation: Fruitland Coal

Footages: 350' FSL & 499' FEL Unit Letter: I Proposed TD: _____

Section: 19, T- 32 -N, R- 7 -W, County: La Plata State: Colorado

Latitude: 37°00.05249' N Longitude: 107°38.54442' W (NAD 27)

Latitude: 37.0008784° N Longitude: 107.6430198° W (NAD 83)

Surface Type: Tribal Fee Owner: BIA/SUIT GP: _____

Mineral Type: Tribal/Fee Water Supply Point: LaBoca Water Hole

Fee Access: _____ Fee Access Owner: _____ R.O.W.: _____

Twinned Well Name: Southern Ute 707H Formation: Fruitland Coal

New Access Rd (# feet/acreage): 992.02 ft. / 0.46 ac. Pad Acreage: 2.11ac.

Total Acres (Access & Pad) Disturbance: 2.57 ac. Percent of Grade: 2%±

NSL: Directional Drill: Yes Pilot B/Hole Footages: 1810' FNL & 940' FWL in Section 20

Pilot B/Hole Latitude: 37°00.31864' N Longitude: 107°38.25965' W (NAD 27)

Pilot B/Hole Latitude: 37.0053142° N Longitude: 107.6382734° W (NAD 83)

NSL: Directional Drill: Yes Lateral 1 B/Hole Footages: 645' FNL & 686' FWL in Section 21

Lateral 1 B/Hole Latitude: 37°00.47419' N Longitude: 107°37.21742' W (NAD 27)

Lateral 1 B/Hole Latitude: 37.0079070° N Longitude: 107.6209022° W (NAD 83)

NSL: Directional Drill: Yes Lateral 2 B/Hole Footages: 1765' FNL & 697' FWL in Section 21

Lateral 2 B/Hole Latitude: 37°00.28952' N Longitude: 107°37.20355' W (NAD 27)

Lateral 2 B/Hole Latitude: 37.0048291° N Longitude: 107.6206710° W (NAD 83)

Previous Footage Location (if moved): 465' FSL & 2265' FWL (Sec. 20)

Reason Moved: Moved per client's request

Previous Name (if applicable): _____

Distance to Edge of Cliff (over 500' not required): _____

Locked Gates/Access Problems: _____

Hilcorp San Juan, L.P.

Distance to Nearest Well: 52'± Well Name/Formation: Southern Ute 707H (Fruitland Coal)

to Nearest Town/Post Office: Ignacio (12 miles) to Nearest Surface Water: 1700'±

Noise Sensitive Area? _____ Full Enclosure? _____ Sound Panels? _____

Housing < 500'? _____ Housing > 1,000'? _____

Onsite Date: _____ Construction Inspector: _____

Attendees: _____

Well Name: _____ SOUTHERN UTE 706H _____

Stipulations:

Road Width: _____ Maximum Grade: _____

Road Design: _____

Turnouts: _____

Existing Road Improvements: _____

Construction Material (inc. sandstone): Available onsite: ___ yes ___ no

Available for access surfacing ___ yes ___ no

If No, Source of Material and ¼ ¼ Section: _____

Drainage and Ditch Design: _____

Onsite / Offsite Erosion Control: _____

Re-vegetation of disturbed areas: ___ contour ___ rip ___ disk ___ reseed

___ other _____

Culverts and/or Bridges (size/location): _____

Fence Cuts and/or Cattleguards: _____

State Highway Permit (or other): ___ yes ___ no _____

Major Cuts/Fills: _____

Temporary Use Area (TUA) ___ yes ___ no _____

Storage of topsoil: _____

Rounded Corners: _____

Trees/Firewood: _____

Incorporate Slash in Fill: ___ yes ___ no Erosion Control: ___ yes ___ no

Noxious Weeds Identified by BLM: ___ yes ___ no _____

MSO: _____ Eagle Nesting: _____ Brack's Cactus: _____ Gilia Formosa: _____

Wintering ___ yes ___ no

Special Management Areas (SMAs): ___ yes ___ no Name of SMA: _____

EA Writer: _____

Colorado

High Density Area: Yes _____ No _____

If Yes; Reason: _____

Soil Types: _____

Land Use: S.U.I.R. Tribal Land _____

Size of Pit: Length: _____ Width: _____ Depth: _____

Calculated Pit Capacity (bbls.): _____

DISTANCE TO NEAREST (1000' or Under):

School: N/A _____

Hospital: N/A _____

Jail: N/A _____

Nursing Home: N/A _____

Assembly Building: N/A _____

Misc. Public Building: N/A _____

Outside Activity Area: N/A _____

DISTANCE TO NEAREST:

Property Line: 350' _____

Lease Line: 350'± _____

Well of Same Formation: 52'± Southern Ute 707H _____

Building: N/A _____

Public Road: Graded Road – 1070'± _____

Major Above Ground Utility: N/A _____

Water Well: N/A _____

Live Water: N/A _____

Railroad: N/A _____

Misc.: N/A _____

Technical Drilling Plan (Rev. 3)

Hilcorp Energy Company proposes to drill and complete the referenced dual lateral 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 11, 2024	Pool:	Fruitland Coal
Well Name:	Southern Ute 706H	Ground Elevation (ft. MSL):	7,106'
Surface Hole Location:	37° 0' 3.150 N, 107° 38' 32.665 W	County, State:	La Plata County, CO
Lateral #1 Depth (ft.)	10,311' MD / 3,764' TVD	Lat 1 Bottom Hole Location:	37° 0' 28.451 N, 107° 37' 13.052' W
Lateral #2 Depth (ft.)	10,067' MD / 3,761' TVD	Lat 2 Bottom Hole Location:	37° 0' 17.391' N, 107° 37' 12.248' W

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	3,186'	Water (fresh/useable)
Kirtland	3,324'	None
Fruitland	3,408'	Gas, Coal, Water

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.
- BOP Testing: The BOPE will be tested to **250 psi (Low) for 5 minutes and 3,000 psi (High) for 10 minutes**. Pressure test **surface casing to 600 psi for 30 minutes and intermediate casing to 1,500 psi for 30 minutes**. Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. BOP equipment will be tested upon installation, every 30 days, and after any repairs are made to the BOP equipment. Annular preventors will be functionally tested at least once per week. Pipe and blind rams will be function tested each trip. **The COGCC and the BLM will be notified 24 hours in advance of testing BOPE**. All tests and inspections will be recorded and logged with time and results. A full BOP test will be conducted if a seal subject to test pressure is broken, following related repairs, and at a minimum of 30-day intervals.

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'	320' / 320'
Intermediate	8-3/4"	7"	23# J55 (or equiv.) LTC	0'	5,004' / 3,817'
Intermediate Shoe Joint	8-3/4"	5-1/2" shoe joint	5-1/2" = 15.5#, J-55, LTC	5,004' / 3,817'	5,046' / 3,836'
Lateral #1 Production Liner (pre-perforated)	6-1/4"	4-1/2"	11.6# L80 (or equiv.) LTC	4,757' / 3,713'	10,311' / 3,764'
Lateral #2 Production Liner (pre-perforated)	6-1/4"	4-1/2"	11.6# L80 (or equiv.) LTC	4,715' / 3,696'	10,067' / 3,761'
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	15.2	11.6	35.3	24.6
Intermediate	7" 23# J55 LTC	1.9	1.7	3.2	2.7
Intermediate Shoe Jt	5-1/2" 15.5# J-55 LTC	2.2	2.2	4.2	2.8
Lateral #1 Production Liner (pre-perforated)	4-1/2" 11.6# L80 LTC	N/A	N/A	2.2	1.8
Lateral #2 Production Liner (pre-perforated)	4-1/2" 11.6# L80 LTC	N/A	N/A	2.3	1.8

Notes:

- The production liners 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 th 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 th joint from top of Ojo Alamo to surface shoe. 1 centralizer inside the surface casing.



Production	N/A
------------	-----

C. Proposed Cement Program:

Proposed Cement Design							
Interval	Depth (ft. MD)	Lead/Tail	Volume (ft ³)	Sacks	Slurry	Density	Planned TOC
Surface	320'	Lead	200 ft ³	144	Type III Cement 2% Calcium Chloride, 0.25 lbs/sk Cello Flake, 0.2% D-CD 2 1.39 ft ³ /sk – 6.65 gal/sk	14.6 ppg	Surface
Intermediate	5,046'	Lead	1072 ft ³	503	Type III Cement 5% D-CSE, 1.2% D-MPA, 0.3% D-SA, 0.3% D-CD, 0.5% D-FP, 0.3% D-R, 0.25 lbs/sk CelloFlake, 0.25 lbs/sk Phenoseal, 0.125 lbs/sk Plexfiber 2.13 ft ³ /sk – 11.957 gal/sk	12.5 ppg	Surface
		Tail	120 ft ³	70	Type III Cement 5% D-CSE, 1.2% D-MPA, 0.5% D-FP, 0.25 lbs/sk CelloFlake, 0.25 lbs/sk Phenoseal, 0.125 lbs/sk Plexfiber 1.71ft ³ /sk – 8.86 gal/sk	13.5 ppg	4,546'
Production Lateral #1	10,311'	N/A	N/A	N/A	N/A – Uncemented pre-perforated liner.	N/A	N/A
Production Lateral #2	10,067'	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 (3,408' 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).

5. Drilling Fluids Program

A. 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' – 5,046'
Production Lateral #1	Produced Water Brine (if needed)	8.5 – 10.5	4-14	1,000 400,000 (if CaCl added for density)	4,757' – 10,311'
Production Lateral #2	Produced Water Brine (if needed)	8.5 – 10.5	4-14	1,000 400,000 (if CaCl added for density)	4,715' – 10,067'

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: 812 bbls (4,555 ft³).

6. Estimated Pressures & Drilling Hazards

A. Estimated Pressures

- Estimated Reservoir Pressure of Fruitland Coal: 600 – 900 psi
- Maximum Anticipated Surface Pressure: 700 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.

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 laterals.

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 laterals 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 laterals from the intermediate casing kick-offs to the production laterals' TD to assist in staying in the desired coal seam while drilling the lateral sections.

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

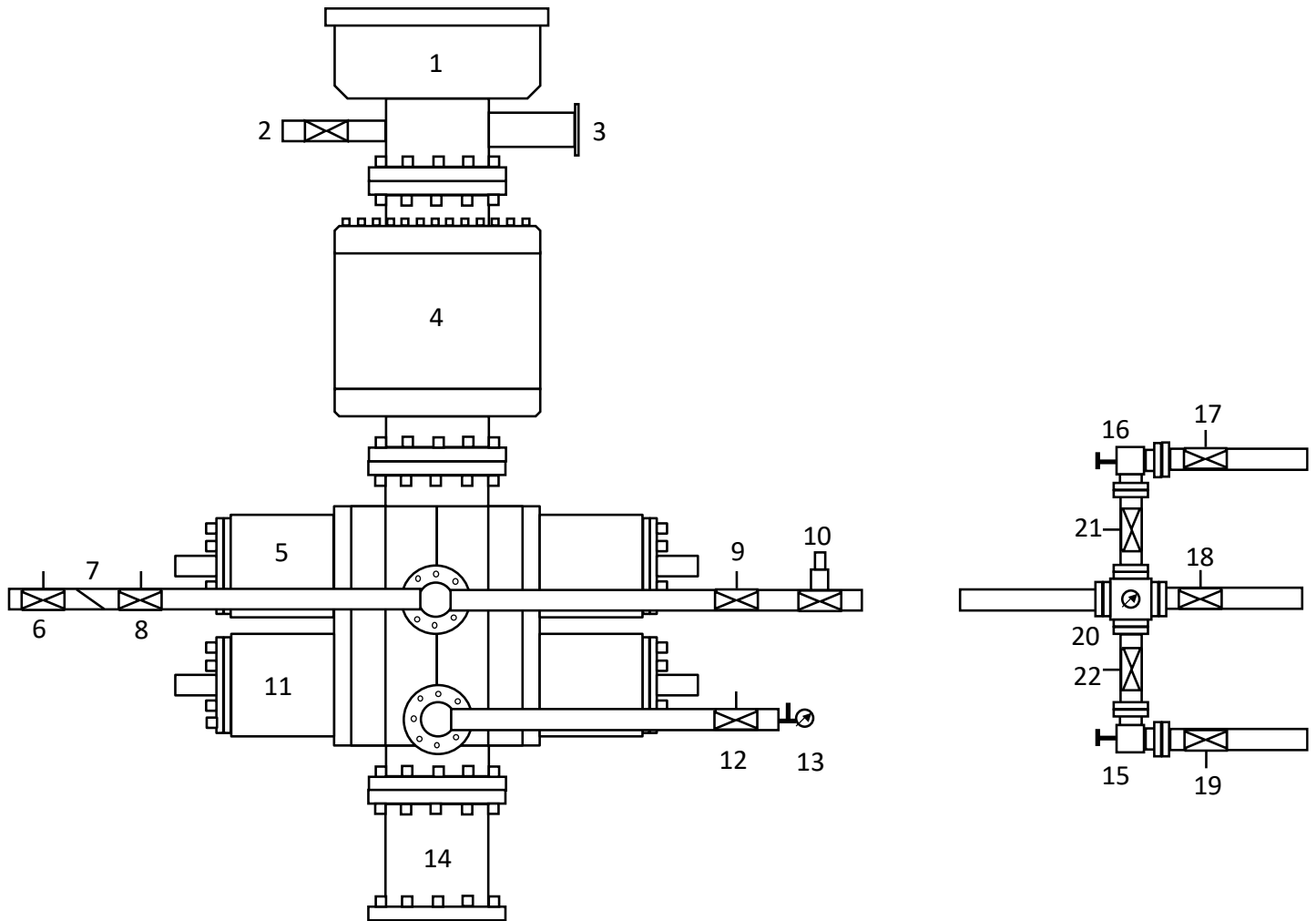
- The 7" intermediate casing will be cemented to surface to protect water bearing zones. If cement is not circulated to surface on the intermediate cement job, a temperature survey or a cement bod log will be run to verify top of cement.

8. Directional Drilling Plan

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

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

Project: Farmington, NM
 Site: San Juan Basin
 Well: Southern Ute 706H
 Wellbore: Pilot 001ST00BP00
 Design: WP2 10/13/23 Update WD
 16:42, October 13 2023

WP2 10/13/23 Update WD										
Surface Location:										
		Northing	Easting	Latitude			Longitude			
		2183644.08	555752.80	37° 0' 3.150 N			107° 38' 32.665 W			
		Reference Elev'n:		15' RKB @ 7121.4usft		GL: 7106.4usft				
Sec	MD	Inc	zi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.00	0.0	
2	2180.0	0.00	0.00	2180.0	0.0	0.0	0.00	0.00	0.0	KOP @ 2180' MD, 5.5°/100' DLS
3	3361.8	65.00	40.52	3124.1	457.2	390.8	5.50	40.52	601.5	EOB & SOH @ 3361.8' MD, 65° INC
4	5046.2	65.00	40.52	3836.0	1617.7	1382.6	0.00	0.00	2128.1	PBHL @ 5046.2' MD

PROJECT DETAILS: Farmington, NM

Geodetic System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone: New Mexico West 3003

System Datum: Mean Sea Level

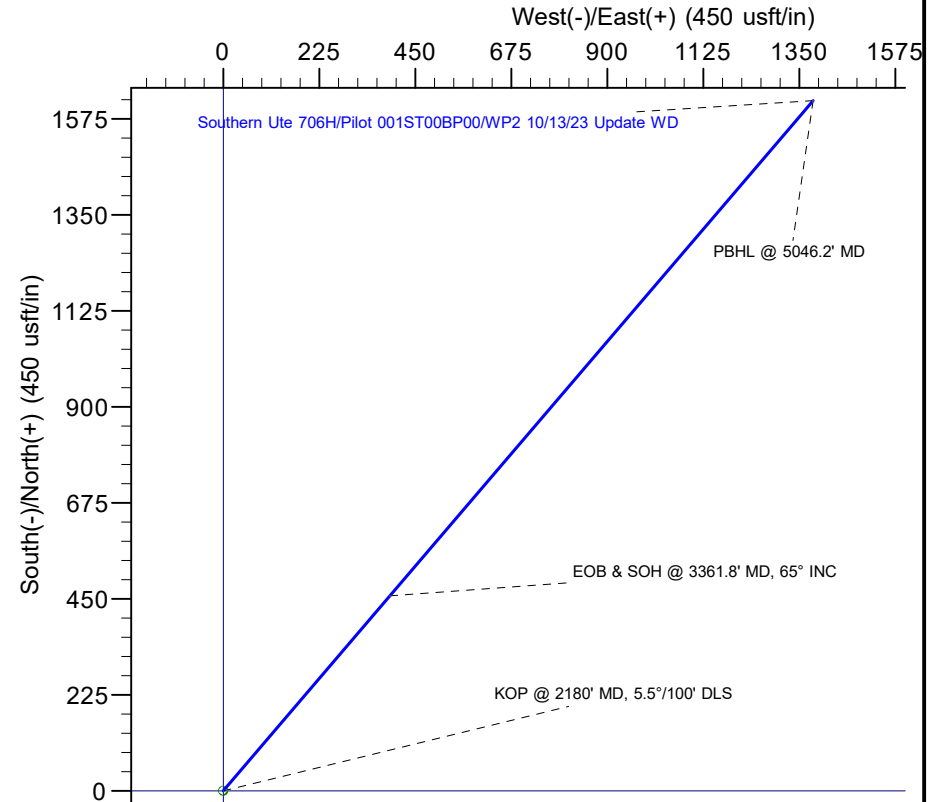
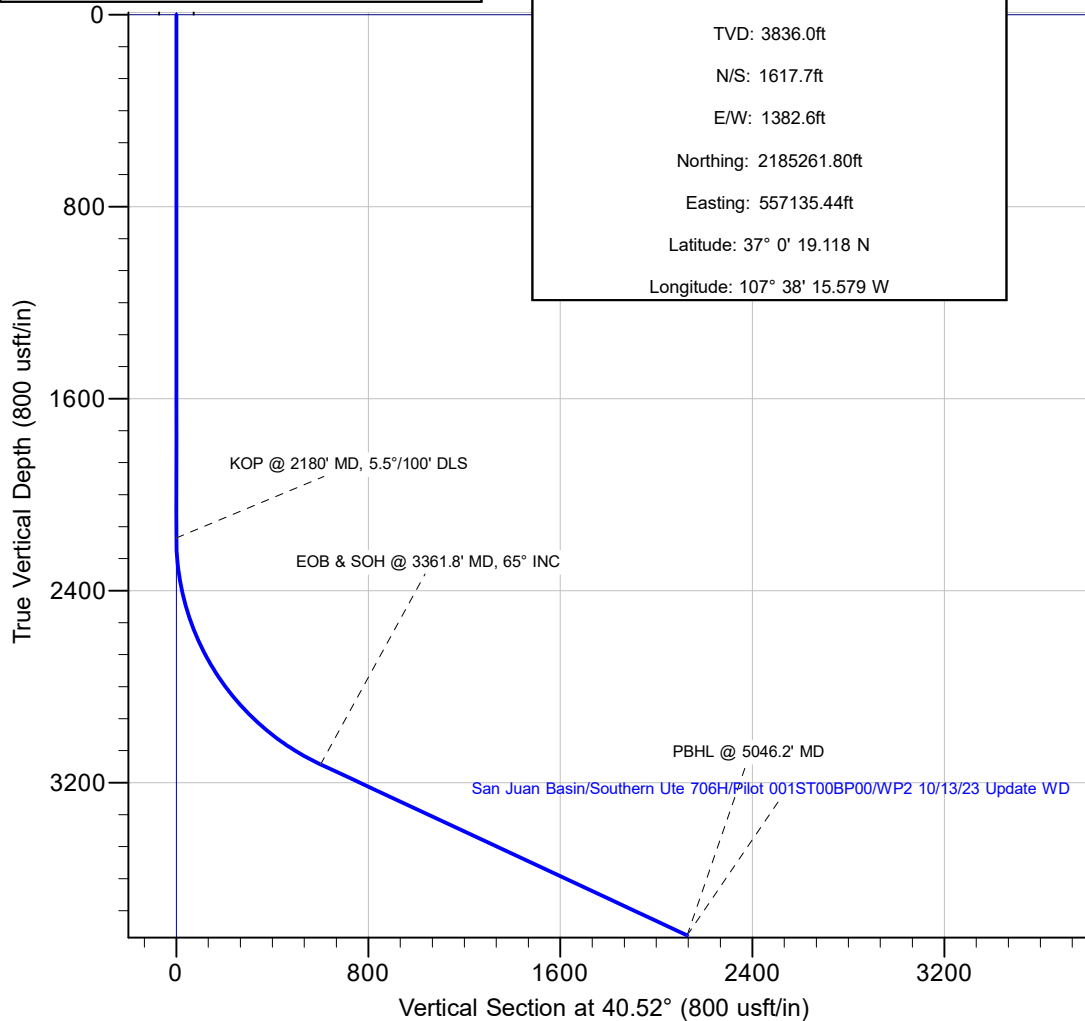
BHL DETAILS

MD: 5046.2ft
 TVD: 3836.0ft
 N/S: 1617.7ft
 E/W: 1382.6ft

Northing: 2185261.80ft
 Easting: 557135.44ft
 Latitude: 37° 0' 19.118 N
 Longitude: 107° 38' 15.579 W



Reference is Grid North



Hilcorp Energy Company

**Farmington, NM
San Juan Basin
Southern Ute 706H**

Pilot 001ST00BP00

Plan: WP2 10/13/23 Update WD

Standard Planning Report - Geographic

13 October, 2023

Halliburton

Planning Report - Geographic

Database:	EDMDB_2023	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot 001ST00BP00		
Design:	WP2 10/13/23 Update WD		

Project Farmington, NM			
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site San Juan Basin			
Site Position:		Northing:	2,186,723.60 usft
From:	Map	Easting:	570,736.10 usft
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "
		Latitude:	37° 0' 33.264 N
		Longitude:	107° 35' 27.852 W

Well Southern Ute 706H			
Well Position	+N-S	0.0 usft	Northing:
	+E-W	0.0 usft	2,183,644.08 usft
			Latitude:
			37° 0' 3.150 N
Position Uncertainty		1.0 usft	Easting:
			555,752.80 usft
			Longitude:
			107° 38' 32.665 W
Grid Convergence:		0.11 °	Wellhead Elevation:
			usft
			Ground Level:
			7,106.4 usft

Wellbore Pilot 001ST00BP00					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	6/14/2023	8.65	63.38	49,461.00916946

Design WP2 10/13/23 Update WD				
Audit Notes:				
Version:		Phase:	PLAN	Tie On Depth:
				0.0
Vertical Section:	Depth From (TVD) (usft)	+N-S (usft)	+E-W (usft)	Direction (°)
	0.0	0.0	0.0	40.52

Plan Survey Tool Program		Date	10/13/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	5,046.2 WP2 10/13/23 Update WD (Pilot)	3_MWD+HRGM	B001Mb: HRGM declination cc	

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,180.0	0.00	0.00	2,180.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,361.8	65.00	40.52	3,124.1	457.2	390.8	5.50	5.50	0.00	40.52	
5,046.2	65.00	40.52	3,836.0	1,617.7	1,382.6	0.00	0.00	0.00	0.00	

Halliburton

Planning Report - Geographic

Database:	EDMDB_2023	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot 001ST00BP00		
Design:	WP2 10/13/23 Update WD		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
100.0	0.00	0.00	100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
200.0	0.00	0.00	200.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
300.0	0.00	0.00	300.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
400.0	0.00	0.00	400.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
500.0	0.00	0.00	500.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
600.0	0.00	0.00	600.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
700.0	0.00	0.00	700.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
800.0	0.00	0.00	800.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
900.0	0.00	0.00	900.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,180.0	0.00	0.00	2,180.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
KOP @ 2180' MD, 5.5°/100' DLS										
2,200.0	1.10	40.52	2,200.0	0.1	0.1	2,183,644.22	555,752.93	37° 0' 3.151 N	107° 38' 32.664 W	
2,300.0	6.60	40.52	2,299.7	5.2	4.5	2,183,649.33	555,757.29	37° 0' 3.201 N	107° 38' 32.610 W	
2,400.0	12.10	40.52	2,398.4	17.6	15.0	2,183,661.67	555,767.84	37° 0' 3.323 N	107° 38' 32.479 W	
2,500.0	17.60	40.52	2,495.0	37.1	31.7	2,183,681.14	555,784.48	37° 0' 3.515 N	107° 38' 32.274 W	
2,600.0	23.10	40.52	2,588.7	63.5	54.3	2,183,707.57	555,807.07	37° 0' 3.776 N	107° 38' 31.995 W	
2,700.0	28.60	40.52	2,678.7	96.6	82.6	2,183,740.70	555,835.38	37° 0' 4.103 N	107° 38' 31.645 W	
2,800.0	34.10	40.52	2,764.0	136.2	116.4	2,183,780.23	555,869.17	37° 0' 4.494 N	107° 38' 31.227 W	
2,900.0	39.60	40.52	2,844.0	181.7	155.3	2,183,825.80	555,908.11	37° 0' 4.943 N	107° 38' 30.746 W	
3,000.0	45.10	40.52	2,917.9	232.9	199.1	2,183,876.98	555,951.86	37° 0' 5.449 N	107° 38' 30.205 W	
3,100.0	50.60	40.52	2,985.0	289.3	247.2	2,183,933.32	556,000.01	37° 0' 6.005 N	107° 38' 29.610 W	
3,200.0	56.10	40.52	3,044.7	350.2	299.3	2,183,994.28	556,052.11	37° 0' 6.606 N	107° 38' 28.966 W	
3,300.0	61.60	40.52	3,096.4	415.3	354.9	2,184,059.30	556,107.69	37° 0' 7.248 N	107° 38' 28.280 W	
3,361.8	65.00	40.52	3,124.1	457.2	390.8	2,184,101.28	556,143.56	37° 0' 7.663 N	107° 38' 27.836 W	
EOB & SOH @ 3361.8' MD, 65° INC										
3,400.0	65.00	40.52	3,140.3	483.5	413.3	2,184,127.58	556,166.04	37° 0' 7.922 N	107° 38' 27.558 W	
3,500.0	65.00	40.52	3,182.5	552.4	472.2	2,184,196.47	556,224.92	37° 0' 8.602 N	107° 38' 26.831 W	
3,600.0	65.00	40.52	3,224.8	621.3	531.0	2,184,265.36	556,283.80	37° 0' 9.282 N	107° 38' 26.103 W	
3,700.0	65.00	40.52	3,267.1	690.2	589.9	2,184,334.25	556,342.68	37° 0' 9.962 N	107° 38' 25.376 W	
3,800.0	65.00	40.52	3,309.3	759.1	648.8	2,184,403.14	556,401.56	37° 0' 10.643 N	107° 38' 24.648 W	
3,900.0	65.00	40.52	3,351.6	828.0	707.7	2,184,472.03	556,460.44	37° 0' 11.323 N	107° 38' 23.920 W	
4,000.0	65.00	40.52	3,393.8	896.9	766.6	2,184,540.92	556,519.32	37° 0' 12.003 N	107° 38' 23.193 W	
4,100.0	65.00	40.52	3,436.1	965.8	825.5	2,184,609.81	556,578.20	37° 0' 12.683 N	107° 38' 22.465 W	
4,200.0	65.00	40.52	3,478.4	1,034.7	884.3	2,184,678.70	556,637.08	37° 0' 13.363 N	107° 38' 21.738 W	
4,300.0	65.00	40.52	3,520.6	1,103.6	943.2	2,184,747.59	556,695.96	37° 0' 14.043 N	107° 38' 21.010 W	
4,400.0	65.00	40.52	3,562.9	1,172.5	1,002.1	2,184,816.48	556,754.84	37° 0' 14.723 N	107° 38' 20.282 W	
4,500.0	65.00	40.52	3,605.2	1,241.4	1,061.0	2,184,885.37	556,813.72	37° 0' 15.403 N	107° 38' 19.555 W	
4,600.0	65.00	40.52	3,647.4	1,310.3	1,119.9	2,184,954.26	556,872.60	37° 0' 16.083 N	107° 38' 18.827 W	
4,700.0	65.00	40.52	3,689.7	1,379.2	1,178.8	2,185,023.15	556,931.48	37° 0' 16.763 N	107° 38' 18.099 W	
4,800.0	65.00	40.52	3,731.9	1,448.1	1,237.7	2,185,092.04	556,990.35	37° 0' 17.443 N	107° 38' 17.372 W	
4,900.0	65.00	40.52	3,774.2	1,517.0	1,296.5	2,185,160.93	557,049.23	37° 0' 18.123 N	107° 38' 16.644 W	

Halliburton
Planning Report - Geographic

Database:	EDMDB_2023	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot 001ST00BP00		
Design:	WP2 10/13/23 Update WD		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
5,000.0	65.00	40.52	3,816.5	1,585.9	1,355.4	2,185,229.82	557,108.11	37° 0' 18.803 N	107° 38' 15.916 W	
5,046.2	65.00	40.52	3,836.0	1,617.7	1,382.6	2,185,261.67	557,135.33	37° 0' 19.117 N	107° 38' 15.580 W	
PBHL @ 5046.2' MD										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
2,180.0	2,180.0	0.0	0.0	KOP @ 2180' MD, 5.5°/100' DLS	
3,361.8	3,124.1	457.2	390.8	EOB & SOH @ 3361.8' MD, 65° INC	
5,046.2	3,836.0	1,617.7	1,382.6	PBHL @ 5046.2' MD	

Hilcorp Energy Company

Farmington, NM

San Juan Basin

Southern Ute 706H

Pilot 001ST00BP00

Plan: WP2 10/13/23 Update WD

Standard Planning Report

13 October, 2023

Halliburton

Planning Report

Database:	EDMDB_2023	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot 001ST00BP00		
Design:	WP2 10/13/23 Update WD		

Project	Farmington, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	San Juan Basin		
Site Position:		Northing:	2,186,723.60 usft
From:	Map	Easting:	570,736.10 usft
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "
		Latitude:	37° 0' 33.264 N
		Longitude:	107° 35' 27.852 W

Well	Southern Ute 706H					
Well Position	+N/-S	0.0 usft	Northing:	2,183,644.08 usft	Latitude:	37° 0' 3.150 N
	+E/-W	0.0 usft	Easting:	555,752.80 usft	Longitude:	107° 38' 32.665 W
Position Uncertainty		1.0 usft	Wellhead Elevation:	usft	Ground Level:	7,106.4 usft
Grid Convergence:		0.11 °				

Wellbore	Pilot 001ST00BP00				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	6/14/2023	8.65	63.38	49,461.00916946

Design	WP2 10/13/23 Update WD			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	40.52

Plan Survey Tool Program	Date	10/13/2023		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	5,046.2	WP2 10/13/23 Update WD (Pilot)	3_MWD+HRGM B001Mb: HRGM declination co

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,180.0	0.00	0.00	2,180.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,361.8	65.00	40.52	3,124.1	457.2	390.8	5.50	5.50	0.00	40.52	
5,046.2	65.00	40.52	3,836.0	1,617.7	1,382.6	0.00	0.00	0.00	0.00	

Halliburton

Planning Report

Database:	EDMDB_2023	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot 001ST00BP00		
Design:	WP2 10/13/23 Update WD		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,180.0	0.00	0.00	2,180.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP @ 2180' MD, 5.5°/100' DLS									
2,200.0	1.10	40.52	2,200.0	0.1	0.1	0.2	5.50	5.50	0.00
2,300.0	6.60	40.52	2,299.7	5.2	4.5	6.9	5.50	5.50	0.00
2,400.0	12.10	40.52	2,398.4	17.6	15.0	23.1	5.50	5.50	0.00
2,500.0	17.60	40.52	2,495.0	37.1	31.7	48.8	5.50	5.50	0.00
2,600.0	23.10	40.52	2,588.7	63.5	54.3	83.5	5.50	5.50	0.00
2,700.0	28.60	40.52	2,678.7	96.6	82.6	127.1	5.50	5.50	0.00
2,800.0	34.10	40.52	2,764.0	136.2	116.4	179.1	5.50	5.50	0.00
2,900.0	39.60	40.52	2,844.0	181.7	155.3	239.1	5.50	5.50	0.00
3,000.0	45.10	40.52	2,917.9	232.9	199.1	306.4	5.50	5.50	0.00
3,100.0	50.60	40.52	2,985.0	289.3	247.2	380.5	5.50	5.50	0.00
3,200.0	56.10	40.52	3,044.7	350.2	299.3	460.7	5.50	5.50	0.00
3,300.0	61.60	40.52	3,096.4	415.3	354.9	546.3	5.50	5.50	0.00
3,361.8	65.00	40.52	3,124.1	457.2	390.8	601.5	5.50	5.50	0.00
EOB & SOH @ 3361.8' MD, 65° INC									
3,400.0	65.00	40.52	3,140.3	483.5	413.3	636.1	0.00	0.00	0.00
3,500.0	65.00	40.52	3,182.5	552.4	472.2	726.7	0.00	0.00	0.00
3,600.0	65.00	40.52	3,224.8	621.3	531.0	817.3	0.00	0.00	0.00
3,700.0	65.00	40.52	3,267.1	690.2	589.9	908.0	0.00	0.00	0.00
3,800.0	65.00	40.52	3,309.3	759.1	648.8	998.6	0.00	0.00	0.00
3,900.0	65.00	40.52	3,351.6	828.0	707.7	1,089.2	0.00	0.00	0.00
4,000.0	65.00	40.52	3,393.8	896.9	766.6	1,179.9	0.00	0.00	0.00
4,100.0	65.00	40.52	3,436.1	965.8	825.5	1,270.5	0.00	0.00	0.00
4,200.0	65.00	40.52	3,478.4	1,034.7	884.3	1,361.1	0.00	0.00	0.00
4,300.0	65.00	40.52	3,520.6	1,103.6	943.2	1,451.8	0.00	0.00	0.00
4,400.0	65.00	40.52	3,562.9	1,172.5	1,002.1	1,542.4	0.00	0.00	0.00
4,500.0	65.00	40.52	3,605.2	1,241.4	1,061.0	1,633.0	0.00	0.00	0.00
4,600.0	65.00	40.52	3,647.4	1,310.3	1,119.9	1,723.7	0.00	0.00	0.00
4,700.0	65.00	40.52	3,689.7	1,379.2	1,178.8	1,814.3	0.00	0.00	0.00
4,800.0	65.00	40.52	3,731.9	1,448.1	1,237.7	1,904.9	0.00	0.00	0.00

Halliburton

Planning Report

Database:	EDMDB_2023	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Pilot 001ST00BP00		
Design:	WP2 10/13/23 Update WD		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,900.0	65.00	40.52	3,774.2	1,517.0	1,296.5	1,995.5	0.00	0.00	0.00	
5,000.0	65.00	40.52	3,816.5	1,585.9	1,355.4	2,086.2	0.00	0.00	0.00	
5,046.2	65.00	40.52	3,836.0	1,617.7	1,382.6	2,128.1	0.00	0.00	0.00	
PBHL @ 5046.2' MD										

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
2,180.0	2,180.0	0.0	0.0	KOP @ 2180' MD, 5.5°/100' DLS	
3,361.8	3,124.1	457.2	390.8	EOB & SOH @ 3361.8' MD, 65° INC	
5,046.2	3,836.0	1,617.7	1,382.6	PBHL @ 5046.2' MD	

Project: Farmington, NM
 Site: San Juan Basin
 Well: Southern Ute 706H
 Wellbore: Lateral No.1
 Design: WP2

8:19, April 05 2024

PROJECT DETAILS: Farmington, NM	
Geodetic System: US State Plane 1927 (Exact solution)	
Datum: NAD 1927 (NADCON CONUS)	
Ellipsoid: Clarke 1866	
Zone: New Mexico West 3003	
System Datum: Mean Sea Level	

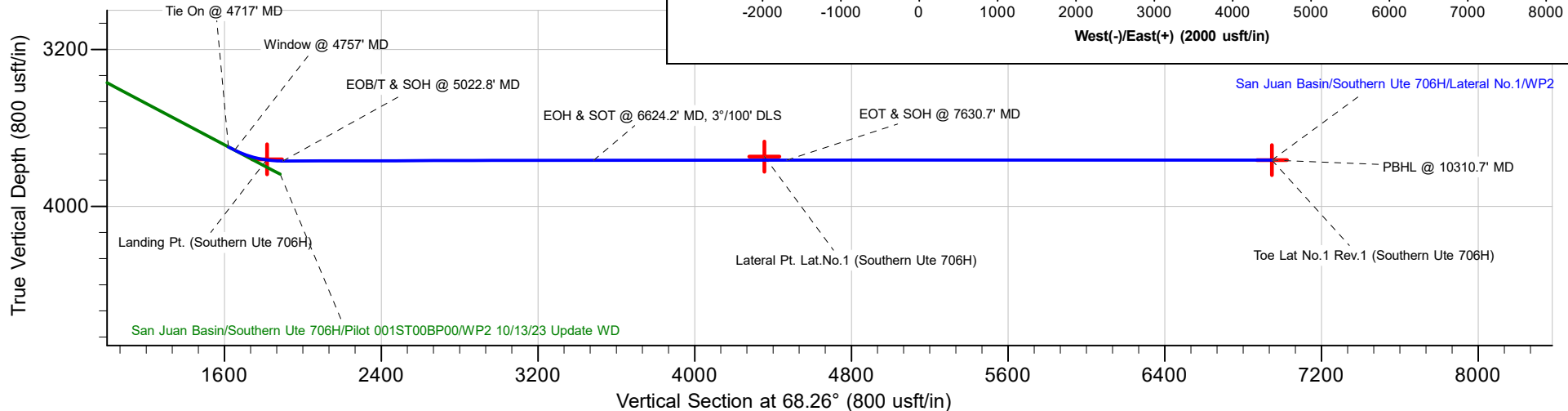
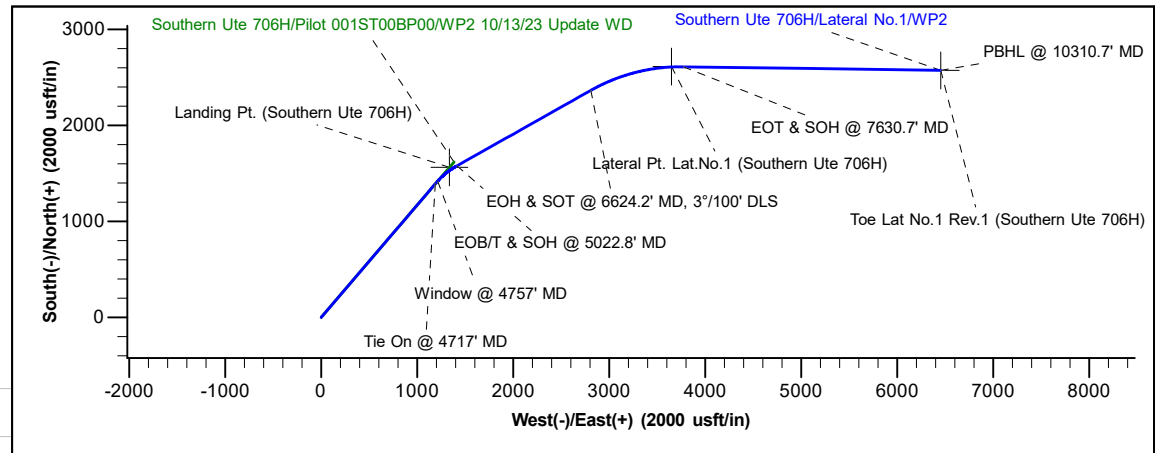
BHL DETAILS	
MD:	10310.7ft
TVD:	3764.0ft
N/S:	2572.6ft
E/W:	6452.5ft
Northing:	2186216.43ft
Easting:	562204.83ft
Latitude:	37° 0' 28.451 N
Longitude:	107° 37' 13.052 W

WP2										
Surface Location:										
		Northing	Easting	Latitude	Longitude					
		2183644.08	555752.80	37° 0' 3.150 N	107° 38' 32.665 W					
		Reference Elev'n:	15' RKB @ 7121.4usft			GL: 7106.4usft				
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Annotation
1	4717.0	65.00	40.52	3696.9	1390.9	1188.8	0.0	0.0	1619.4	Tie On @ 4717' MD
2	4757.0	65.85	41.45	3713.5	1418.4	1212.6	3.00	45.00	1651.7	Window @ 4757' MD
3	5022.8	90.13	60.61	3768.9	1578.3	1413.5	11.50	40.18	1897.5	EOB/T & SOH @ 5022.8' MD
4	6624.2	90.13	60.61	3765.2	2364.3	2808.7	0.00	0.00	3484.6	EOH & SOT @ 6624.2' MD, 3°/100' DLS
5	7630.7	90.00	90.80	3764.0	2610.0	3772.8	3.00	90.23	4471.1	EOT & SOH @ 7630.7' MD
6	10310.7	90.00	90.80	3764.0	2572.6	6452.5	0.00	0.00	6946.5	PBHL @ 10310.7' MD

Target Details									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
Lateral Pt. Lat.No.1 (Southern Ute 706H)	3746.4	2611.4	3647.7	2186255.30	559400.20	37° 0' 28.896 N	107° 37' 47.630 W	Point	
Landing Pt. (Southern Ute 706H)	3760.4	1561.1	1334.1	2185205.10	557086.80	37° 0' 18.559 N	107° 38' 16.180 W	Point	
Toe Lat No.1 Rev.1 (Southern Ute 706H)	3764.0	2572.6	6452.5	2186216.43	562204.83	37° 0' 28.451 N	107° 37' 13.052 W	Point	



Reference is Grid North



Hilcorp Energy Company

**Farmington, NM
San Juan Basin
Southern Ute 706H**

Lateral No.1

Plan: WP2

Standard Planning Report - Geographic

05 April, 2024

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Project	Farmington, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	San Juan Basin		
Site Position:		Northing:	2,186,723.60 usft
From:	Map	Easting:	570,736.10 usft
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "
		Latitude:	37° 0' 33.264 N
		Longitude:	107° 35' 27.852 W

Well	Southern Ute 706H					
Well Position	+N/-S	0.0 usft	Northing:	2,183,644.08 usft	Latitude:	37° 0' 3.150 N
	+E/-W	0.0 usft	Easting:	555,752.80 usft	Longitude:	107° 38' 32.665 W
Position Uncertainty		1.0 usft	Wellhead Elevation:	usft	Ground Level:	7,106.4 usft
Grid Convergence:		0.11 °				

Wellbore	Lateral No.1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	8/14/2023	8.63	63.37	49,442.28720861

Design	WP2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	4,717.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	68.26

Plan Survey Tool Program	Date	4/4/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	4,717.0	10,310.7 WP2 (Lateral No.1)	3_MWD+HRGM	B001Mb: HRGM declination cc

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
4,717.0	65.00	40.52	3,696.9	1,390.9	1,188.8	0.00	0.00	0.00	0.00	
4,757.0	65.85	41.45	3,713.5	1,418.4	1,212.6	3.00	2.13	2.32	45.00	
5,022.8	90.13	60.61	3,768.9	1,578.3	1,413.5	11.50	9.13	7.21	40.18	
6,624.2	90.13	60.61	3,765.2	2,364.3	2,808.7	0.00	0.00	0.00	0.00	
7,630.7	90.00	90.80	3,764.0	2,610.0	3,772.8	3.00	-0.01	3.00	90.23	
10,310.7	90.00	90.80	3,764.0	2,572.6	6,452.5	0.00	0.00	0.00	0.00	Toe Lat No.1 Rev.1 (€

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
100.0	0.00	0.00	100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
200.0	0.00	0.00	200.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
300.0	0.00	0.00	300.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
400.0	0.00	0.00	400.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
500.0	0.00	0.00	500.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
600.0	0.00	0.00	600.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
700.0	0.00	0.00	700.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
800.0	0.00	0.00	800.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
900.0	0.00	0.00	900.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,180.0	0.00	0.00	2,180.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,200.0	1.10	40.52	2,200.0	0.1	0.1	2,183,644.22	555,752.93	37° 0' 3.151 N	107° 38' 32.664 W	
2,300.0	6.60	40.52	2,299.7	5.2	4.5	2,183,649.33	555,757.29	37° 0' 3.201 N	107° 38' 32.610 W	
2,400.0	12.10	40.52	2,398.4	17.6	15.0	2,183,661.67	555,767.84	37° 0' 3.323 N	107° 38' 32.479 W	
2,500.0	17.60	40.52	2,495.0	37.1	31.7	2,183,681.14	555,784.48	37° 0' 3.515 N	107° 38' 32.274 W	
2,600.0	23.10	40.52	2,588.7	63.5	54.3	2,183,707.57	555,807.07	37° 0' 3.776 N	107° 38' 31.995 W	
2,700.0	28.60	40.52	2,678.7	96.6	82.6	2,183,740.70	555,835.38	37° 0' 4.103 N	107° 38' 31.645 W	
2,800.0	34.10	40.52	2,764.0	136.2	116.4	2,183,780.23	555,869.17	37° 0' 4.494 N	107° 38' 31.227 W	
2,900.0	39.60	40.52	2,844.0	181.7	155.3	2,183,825.80	555,908.11	37° 0' 4.943 N	107° 38' 30.746 W	
3,000.0	45.10	40.52	2,917.9	232.9	199.1	2,183,876.98	555,951.86	37° 0' 5.449 N	107° 38' 30.205 W	
3,100.0	50.60	40.52	2,985.0	289.3	247.2	2,183,933.32	556,000.01	37° 0' 6.005 N	107° 38' 29.610 W	
3,200.0	56.10	40.52	3,044.7	350.2	299.3	2,183,994.28	556,052.11	37° 0' 6.606 N	107° 38' 28.966 W	
3,300.0	61.60	40.52	3,096.4	415.3	354.9	2,184,059.30	556,107.69	37° 0' 7.248 N	107° 38' 28.280 W	
3,361.8	65.00	40.52	3,124.1	457.2	390.8	2,184,101.28	556,143.56	37° 0' 7.663 N	107° 38' 27.836 W	
3,400.0	65.00	40.52	3,140.3	483.5	413.3	2,184,127.58	556,166.04	37° 0' 7.922 N	107° 38' 27.558 W	
3,500.0	65.00	40.52	3,182.5	552.4	472.2	2,184,196.47	556,224.92	37° 0' 8.602 N	107° 38' 26.831 W	
3,600.0	65.00	40.52	3,224.8	621.3	531.0	2,184,265.36	556,283.80	37° 0' 9.282 N	107° 38' 26.103 W	
3,700.0	65.00	40.52	3,267.1	690.2	589.9	2,184,334.25	556,342.68	37° 0' 9.962 N	107° 38' 25.376 W	
3,800.0	65.00	40.52	3,309.3	759.1	648.8	2,184,403.14	556,401.56	37° 0' 10.643 N	107° 38' 24.648 W	
3,900.0	65.00	40.52	3,351.6	828.0	707.7	2,184,472.03	556,460.44	37° 0' 11.323 N	107° 38' 23.920 W	
4,000.0	65.00	40.52	3,393.8	896.9	766.6	2,184,540.92	556,519.32	37° 0' 12.003 N	107° 38' 23.193 W	
4,100.0	65.00	40.52	3,436.1	965.8	825.5	2,184,609.81	556,578.20	37° 0' 12.683 N	107° 38' 22.465 W	
4,200.0	65.00	40.52	3,478.4	1,034.7	884.3	2,184,678.70	556,637.08	37° 0' 13.363 N	107° 38' 21.738 W	
4,300.0	65.00	40.52	3,520.6	1,103.6	943.2	2,184,747.59	556,695.96	37° 0' 14.043 N	107° 38' 21.010 W	
4,400.0	65.00	40.52	3,562.9	1,172.5	1,002.1	2,184,816.48	556,754.84	37° 0' 14.723 N	107° 38' 20.282 W	
4,500.0	65.00	40.52	3,605.2	1,241.4	1,061.0	2,184,885.37	556,813.72	37° 0' 15.403 N	107° 38' 19.555 W	
4,600.0	65.00	40.52	3,647.4	1,310.3	1,119.9	2,184,954.26	556,872.60	37° 0' 16.083 N	107° 38' 18.827 W	
4,700.0	65.00	40.52	3,689.7	1,379.2	1,178.8	2,185,023.15	556,931.48	37° 0' 16.763 N	107° 38' 18.099 W	
4,717.0	65.00	40.52	3,696.9	1,390.9	1,188.8	2,185,034.86	556,941.48	37° 0' 16.878 N	107° 38' 17.976 W	
4,757.0	65.85	41.45	3,713.5	1,418.4	1,212.6	2,185,062.32	556,965.34	37° 0' 17.149 N	107° 38' 17.681 W	
4,775.0	67.44	42.90	3,720.6	1,430.6	1,223.7	2,185,074.56	556,976.43	37° 0' 17.270 N	107° 38' 17.544 W	
4,800.0	69.67	44.85	3,729.8	1,447.4	1,239.9	2,185,091.33	556,992.56	37° 0' 17.436 N	107° 38' 17.344 W	
4,825.0	71.91	46.75	3,738.0	1,463.8	1,256.8	2,185,107.79	557,009.48	37° 0' 17.598 N	107° 38' 17.135 W	

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,850.0	74.18	48.60	3,745.3	1,479.9	1,274.5	2,185,123.88	557,027.16	37° 0' 17.757 N	107° 38' 16.917 W	
4,875.0	76.46	50.41	3,751.6	1,495.6	1,292.9	2,185,139.58	557,045.55	37° 0' 17.912 N	107° 38' 16.690 W	
4,900.0	78.75	52.18	3,757.0	1,510.9	1,311.9	2,185,154.85	557,064.60	37° 0' 18.062 N	107° 38' 16.455 W	
4,925.0	81.06	53.93	3,761.4	1,525.7	1,331.6	2,185,169.64	557,084.27	37° 0' 18.208 N	107° 38' 16.212 W	
4,950.0	83.37	55.65	3,764.8	1,540.0	1,351.8	2,185,183.92	557,104.51	37° 0' 18.349 N	107° 38' 15.962 W	
4,975.0	85.69	57.36	3,767.1	1,553.7	1,372.6	2,185,197.65	557,125.26	37° 0' 18.484 N	107° 38' 15.706 W	
5,000.0	88.01	59.06	3,768.5	1,566.8	1,393.8	2,185,210.79	557,146.47	37° 0' 18.614 N	107° 38' 15.444 W	
5,022.8	90.13	60.61	3,768.9	1,578.3	1,413.5	2,185,222.26	557,166.19	37° 0' 18.727 N	107° 38' 15.200 W	
5,100.0	90.13	60.61	3,768.7	1,616.2	1,480.7	2,185,260.13	557,233.43	37° 0' 19.100 N	107° 38' 14.371 W	
5,200.0	90.13	60.61	3,768.5	1,665.3	1,567.9	2,185,309.21	557,320.55	37° 0' 19.584 N	107° 38' 13.295 W	
5,300.0	90.13	60.61	3,768.2	1,714.3	1,655.0	2,185,358.29	557,407.67	37° 0' 20.067 N	107° 38' 12.220 W	
5,400.0	90.13	60.61	3,768.0	1,763.4	1,742.1	2,185,407.37	557,494.79	37° 0' 20.551 N	107° 38' 11.145 W	
5,500.0	90.13	60.61	3,767.8	1,812.5	1,829.3	2,185,456.44	557,581.91	37° 0' 21.034 N	107° 38' 10.069 W	
5,600.0	90.13	60.61	3,767.6	1,861.6	1,916.4	2,185,505.52	557,669.03	37° 0' 21.518 N	107° 38' 8.994 W	
5,700.0	90.13	60.61	3,767.3	1,910.7	2,003.5	2,185,554.60	557,756.15	37° 0' 22.001 N	107° 38' 7.918 W	
5,800.0	90.13	60.61	3,767.1	1,959.8	2,090.6	2,185,603.67	557,843.27	37° 0' 22.485 N	107° 38' 6.843 W	
5,900.0	90.13	60.61	3,766.9	2,008.8	2,177.8	2,185,652.75	557,930.39	37° 0' 22.968 N	107° 38' 5.768 W	
6,000.0	90.13	60.61	3,766.6	2,057.9	2,264.9	2,185,701.83	558,017.51	37° 0' 23.452 N	107° 38' 4.692 W	
6,100.0	90.13	60.61	3,766.4	2,107.0	2,352.0	2,185,750.91	558,104.63	37° 0' 23.935 N	107° 38' 3.617 W	
6,200.0	90.13	60.61	3,766.2	2,156.1	2,439.1	2,185,799.98	558,191.75	37° 0' 24.419 N	107° 38' 2.542 W	
6,300.0	90.13	60.61	3,765.9	2,205.2	2,526.3	2,185,849.06	558,278.86	37° 0' 24.902 N	107° 38' 1.466 W	
6,400.0	90.13	60.61	3,765.7	2,254.2	2,613.4	2,185,898.14	558,365.98	37° 0' 25.386 N	107° 38' 0.391 W	
6,500.0	90.13	60.61	3,765.5	2,303.3	2,700.5	2,185,947.22	558,453.10	37° 0' 25.869 N	107° 37' 59.316 W	
6,600.0	90.13	60.61	3,765.2	2,352.4	2,787.6	2,185,996.29	558,540.22	37° 0' 26.353 N	107° 37' 58.240 W	
6,624.2	90.13	60.61	3,765.2	2,364.3	2,808.7	2,186,008.18	558,561.33	37° 0' 26.470 N	107° 37' 57.980 W	
6,700.0	90.12	62.88	3,765.0	2,400.2	2,875.5	2,186,044.05	558,628.06	37° 0' 26.823 N	107° 37' 57.156 W	
6,800.0	90.11	65.88	3,764.8	2,443.4	2,965.6	2,186,087.28	558,718.21	37° 0' 27.249 N	107° 37' 56.043 W	
6,900.0	90.10	68.88	3,764.6	2,481.9	3,057.9	2,186,125.74	558,810.50	37° 0' 27.627 N	107° 37' 54.904 W	
7,000.0	90.09	71.88	3,764.5	2,515.4	3,152.1	2,186,159.31	558,904.68	37° 0' 27.957 N	107° 37' 53.742 W	
7,100.0	90.07	74.88	3,764.3	2,544.0	3,247.9	2,186,187.91	559,000.48	37° 0' 28.238 N	107° 37' 52.561 W	
7,200.0	90.06	77.88	3,764.2	2,567.6	3,345.1	2,186,211.46	559,097.65	37° 0' 28.468 N	107° 37' 51.362 W	
7,300.0	90.05	80.88	3,764.1	2,586.0	3,443.4	2,186,229.88	559,195.92	37° 0' 28.649 N	107° 37' 50.150 W	
7,400.0	90.03	83.88	3,764.1	2,599.3	3,542.5	2,186,243.14	559,295.01	37° 0' 28.778 N	107° 37' 48.928 W	
7,500.0	90.02	86.88	3,764.0	2,607.3	3,642.2	2,186,251.20	559,394.67	37° 0' 28.855 N	107° 37' 47.699 W	
7,600.0	90.00	89.88	3,764.0	2,610.2	3,742.1	2,186,254.03	559,494.61	37° 0' 28.881 N	107° 37' 46.466 W	
7,630.7	90.00	90.80	3,764.0	2,610.0	3,772.8	2,186,253.84	559,525.31	37° 0' 28.879 N	107° 37' 46.088 W	
7,700.0	90.00	90.80	3,764.0	2,609.0	3,842.1	2,186,252.88	559,594.59	37° 0' 28.868 N	107° 37' 45.234 W	
7,800.0	90.00	90.80	3,764.0	2,607.6	3,942.1	2,186,251.48	559,694.58	37° 0' 28.852 N	107° 37' 44.001 W	
7,900.0	90.00	90.80	3,764.0	2,606.2	4,042.1	2,186,250.08	559,794.56	37° 0' 28.836 N	107° 37' 42.768 W	
8,000.0	90.00	90.80	3,764.0	2,604.8	4,142.1	2,186,248.69	559,894.54	37° 0' 28.820 N	107° 37' 41.536 W	
8,100.0	90.00	90.80	3,764.0	2,603.4	4,242.1	2,186,247.29	559,994.52	37° 0' 28.804 N	107° 37' 40.303 W	
8,200.0	90.00	90.80	3,764.0	2,602.0	4,342.0	2,186,245.90	560,094.51	37° 0' 28.788 N	107° 37' 39.070 W	
8,300.0	90.00	90.80	3,764.0	2,600.6	4,442.0	2,186,244.50	560,194.49	37° 0' 28.772 N	107° 37' 37.838 W	
8,400.0	90.00	90.80	3,764.0	2,599.2	4,542.0	2,186,243.10	560,294.47	37° 0' 28.756 N	107° 37' 36.605 W	
8,500.0	90.00	90.80	3,764.0	2,597.8	4,642.0	2,186,241.71	560,394.45	37° 0' 28.740 N	107° 37' 35.372 W	
8,600.0	90.00	90.80	3,764.0	2,596.4	4,742.0	2,186,240.31	560,494.43	37° 0' 28.724 N	107° 37' 34.140 W	
8,700.0	90.00	90.80	3,764.0	2,595.0	4,842.0	2,186,238.91	560,594.42	37° 0' 28.708 N	107° 37' 32.907 W	
8,800.0	90.00	90.80	3,764.0	2,593.6	4,942.0	2,186,237.52	560,694.40	37° 0' 28.692 N	107° 37' 31.674 W	
8,900.0	90.00	90.80	3,764.0	2,592.3	5,042.0	2,186,236.12	560,794.38	37° 0' 28.676 N	107° 37' 30.442 W	
9,000.0	90.00	90.80	3,764.0	2,590.9	5,142.0	2,186,234.73	560,894.36	37° 0' 28.660 N	107° 37' 29.209 W	
9,100.0	90.00	90.80	3,764.0	2,589.5	5,242.0	2,186,233.33	560,994.35	37° 0' 28.644 N	107° 37' 27.976 W	
9,200.0	90.00	90.80	3,764.0	2,588.1	5,342.0	2,186,231.93	561,094.33	37° 0' 28.628 N	107° 37' 26.744 W	
9,300.0	90.00	90.80	3,764.0	2,586.7	5,441.9	2,186,230.54	561,194.31	37° 0' 28.612 N	107° 37' 25.511 W	
9,400.0	90.00	90.80	3,764.0	2,585.3	5,541.9	2,186,229.14	561,294.29	37° 0' 28.596 N	107° 37' 24.278 W	
9,500.0	90.00	90.80	3,764.0	2,583.9	5,641.9	2,186,227.75	561,394.28	37° 0' 28.580 N	107° 37' 23.046 W	

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,600.0	90.00	90.80	3,764.0	2,582.5	5,741.9	2,186,226.35	561,494.26	37° 0' 28.564 N	107° 37' 21.813 W	
9,700.0	90.00	90.80	3,764.0	2,581.1	5,841.9	2,186,224.95	561,594.24	37° 0' 28.548 N	107° 37' 20.580 W	
9,800.0	90.00	90.80	3,764.0	2,579.7	5,941.9	2,186,223.56	561,694.22	37° 0' 28.532 N	107° 37' 19.348 W	
9,900.0	90.00	90.80	3,764.0	2,578.3	6,041.9	2,186,222.16	561,794.20	37° 0' 28.516 N	107° 37' 18.115 W	
10,000.0	90.00	90.80	3,764.0	2,576.9	6,141.9	2,186,220.77	561,894.19	37° 0' 28.500 N	107° 37' 16.882 W	
10,100.0	90.00	90.80	3,764.0	2,575.5	6,241.9	2,186,219.37	561,994.17	37° 0' 28.484 N	107° 37' 15.650 W	
10,200.0	90.00	90.80	3,764.0	2,574.1	6,341.9	2,186,217.97	562,094.15	37° 0' 28.468 N	107° 37' 14.417 W	
10,300.0	90.00	90.80	3,764.0	2,572.7	6,441.8	2,186,216.58	562,194.13	37° 0' 28.452 N	107° 37' 13.184 W	
10,310.7	90.00	90.80	3,764.0	2,572.6	6,452.5	2,186,216.43	562,204.83	37° 0' 28.451 N	107° 37' 13.052 W	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Lateral Pt. Lat.No.1 (Sol - hit/miss target center by 18.0usft at 7505.7usft MD (3764.0 TVD, 2607.6 N, 3647.8 E) - Shape - Point	0.00	0.00	3,746.4	2,611.4	3,647.7	2,186,255.30	559,400.20	37° 0' 28.896 N	107° 37' 47.630 W	
Landing Pt. (Southern U - plan misses target center by 27.8usft at 4947.2usft MD (3764.4 TVD, 1538.4 N, 1349.5 E) - Point	0.00	0.00	3,760.4	1,561.1	1,334.1	2,185,205.10	557,086.80	37° 0' 18.559 N	107° 38' 16.180 W	
Toe Lat No.1 Rev.1 (Sol - plan hits target center - Point	0.00	0.00	3,764.0	2,572.6	6,452.5	2,186,216.43	562,204.83	37° 0' 28.451 N	107° 37' 13.052 W	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,900.0	3,757.0	Top of Big Blue Seam		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
4,717.0	3,696.9	1,390.9	1,188.8	Tie On @ 4717' MD	
4,757.0	3,713.5	1,418.4	1,212.6	Window @ 4757' MD	
5,022.8	3,768.9	1,578.3	1,413.5	EOB & SOH @ 5022.8' MD, 90.1° INC	
6,624.2	3,765.2	2,364.3	2,808.8	EOH & SOT @ 6624.2' MD, 3°/100' DLS	
7,630.7	3,764.0	2,610.0	3,772.8	EOT & SOH @ 7630.7' MD	
10,310.7	3,764.0	2,572.6	6,452.5	PBHL @ 10310.7' MD	

Hilcorp Energy Company

**Farmington, NM
San Juan Basin
Southern Ute 706H**

Lateral No.1

Plan: WP2

Standard Planning Report

05 April, 2024

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Project	Farmington, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	San Juan Basin				
Site Position:	Northing:	2,186,723.60 usft	Latitude:	37° 0' 33.264 N	
From:	Map	Easting:	570,736.10 usft	Longitude:	107° 35' 27.852 W
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "		

Well	Southern Ute 706H					
Well Position	+N/-S	0.0 usft	Northing:	2,183,644.08 usft	Latitude:	37° 0' 3.150 N
	+E/-W	0.0 usft	Easting:	555,752.80 usft	Longitude:	107° 38' 32.665 W
Position Uncertainty		1.0 usft	Wellhead Elevation:	usft	Ground Level:	7,106.4 usft
Grid Convergence:		0.11 °				

Wellbore	Lateral No.1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	8/14/2023	8.63	63.37	49,442.28720861

Design	WP2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	4,717.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	68.26

Plan Survey Tool Program	Date	4/4/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	4,717.0	10,310.7	WP2 (Lateral No.1)	3_MWD+HRGM B001Mb: HRGM declination co

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
4,717.0	65.00	40.52	3,696.9	1,390.9	1,188.8	0.00	0.00	0.00	0.00	
4,757.0	65.85	41.45	3,713.5	1,418.4	1,212.6	3.00	2.13	2.32	45.00	
5,022.8	90.13	60.61	3,768.9	1,578.3	1,413.5	11.50	9.13	7.21	40.18	
6,624.2	90.13	60.61	3,765.2	2,364.3	2,808.7	0.00	0.00	0.00	0.00	
7,630.7	90.00	90.80	3,764.0	2,610.0	3,772.8	3.00	-0.01	3.00	90.23	
10,310.7	90.00	90.80	3,764.0	2,572.6	6,452.5	0.00	0.00	0.00	0.00	Toe Lat No.1 Rev.1 (€

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,180.0	0.00	0.00	2,180.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	1.10	40.52	2,200.0	0.1	0.1	0.2	5.50	5.50	0.00
2,300.0	6.60	40.52	2,299.7	5.2	4.5	6.1	5.50	5.50	0.00
2,400.0	12.10	40.52	2,398.4	17.6	15.0	20.5	5.50	5.50	0.00
2,500.0	17.60	40.52	2,495.0	37.1	31.7	43.2	5.50	5.50	0.00
2,600.0	23.10	40.52	2,588.7	63.5	54.3	73.9	5.50	5.50	0.00
2,700.0	28.60	40.52	2,678.7	96.6	82.6	112.5	5.50	5.50	0.00
2,800.0	34.10	40.52	2,764.0	136.2	116.4	158.5	5.50	5.50	0.00
2,900.0	39.60	40.52	2,844.0	181.7	155.3	211.6	5.50	5.50	0.00
3,000.0	45.10	40.52	2,917.9	232.9	199.1	271.2	5.50	5.50	0.00
3,100.0	50.60	40.52	2,985.0	289.3	247.2	336.8	5.50	5.50	0.00
3,200.0	56.10	40.52	3,044.7	350.2	299.3	407.8	5.50	5.50	0.00
3,300.0	61.60	40.52	3,096.4	415.3	354.9	483.5	5.50	5.50	0.00
3,361.8	65.00	40.52	3,124.1	457.2	390.8	532.3	5.50	5.50	0.00
3,400.0	65.00	40.52	3,140.3	483.5	413.3	563.0	0.00	0.00	0.00
3,500.0	65.00	40.52	3,182.5	552.4	472.2	643.2	0.00	0.00	0.00
3,600.0	65.00	40.52	3,224.8	621.3	531.0	723.4	0.00	0.00	0.00
3,700.0	65.00	40.52	3,267.1	690.2	589.9	803.6	0.00	0.00	0.00
3,800.0	65.00	40.52	3,309.3	759.1	648.8	883.8	0.00	0.00	0.00
3,900.0	65.00	40.52	3,351.6	828.0	707.7	964.0	0.00	0.00	0.00
4,000.0	65.00	40.52	3,393.8	896.9	766.6	1,044.2	0.00	0.00	0.00
4,100.0	65.00	40.52	3,436.1	965.8	825.5	1,124.4	0.00	0.00	0.00
4,200.0	65.00	40.52	3,478.4	1,034.7	884.3	1,204.7	0.00	0.00	0.00
4,300.0	65.00	40.52	3,520.6	1,103.6	943.2	1,284.9	0.00	0.00	0.00
4,400.0	65.00	40.52	3,562.9	1,172.5	1,002.1	1,365.1	0.00	0.00	0.00
4,500.0	65.00	40.52	3,605.2	1,241.4	1,061.0	1,445.3	0.00	0.00	0.00
4,600.0	65.00	40.52	3,647.4	1,310.3	1,119.9	1,525.5	0.00	0.00	0.00
4,700.0	65.00	40.52	3,689.7	1,379.2	1,178.8	1,605.7	0.00	0.00	0.00
4,717.0	65.00	40.52	3,696.9	1,390.9	1,188.8	1,619.4	0.00	0.00	0.00
4,757.0	65.85	41.45	3,713.5	1,418.4	1,212.6	1,651.7	3.00	2.13	2.32
4,775.0	67.44	42.90	3,720.6	1,430.6	1,223.7	1,666.5	11.50	8.82	8.03
4,800.0	69.67	44.85	3,729.8	1,447.4	1,239.9	1,687.7	11.50	8.91	7.82

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,825.0	71.91	46.75	3,738.0	1,463.8	1,256.8	1,709.5	11.50	8.99	7.59
4,850.0	74.18	48.60	3,745.3	1,479.9	1,274.5	1,731.9	11.50	9.06	7.40
4,875.0	76.46	50.41	3,751.6	1,495.6	1,292.9	1,754.8	11.50	9.12	7.24
4,900.0	78.75	52.18	3,757.0	1,510.9	1,311.9	1,778.2	11.50	9.18	7.10
4,925.0	81.06	53.93	3,761.4	1,525.7	1,331.6	1,801.9	11.50	9.22	6.99
4,950.0	83.37	55.65	3,764.8	1,540.0	1,351.8	1,826.0	11.50	9.25	6.90
4,975.0	85.69	57.36	3,767.1	1,553.7	1,372.6	1,850.4	11.50	9.27	6.83
5,000.0	88.01	59.06	3,768.5	1,566.8	1,393.8	1,874.9	11.50	9.29	6.79
5,022.8	90.13	60.61	3,768.9	1,578.3	1,413.5	1,897.5	11.50	9.29	6.77
5,100.0	90.13	60.61	3,768.7	1,616.2	1,480.7	1,974.0	0.00	0.00	0.00
5,200.0	90.13	60.61	3,768.5	1,665.3	1,567.9	2,073.1	0.00	0.00	0.00
5,300.0	90.13	60.61	3,768.2	1,714.3	1,655.0	2,172.2	0.00	0.00	0.00
5,400.0	90.13	60.61	3,768.0	1,763.4	1,742.1	2,271.3	0.00	0.00	0.00
5,500.0	90.13	60.61	3,767.8	1,812.5	1,829.3	2,370.4	0.00	0.00	0.00
5,600.0	90.13	60.61	3,767.6	1,861.6	1,916.4	2,469.5	0.00	0.00	0.00
5,700.0	90.13	60.61	3,767.3	1,910.7	2,003.5	2,568.6	0.00	0.00	0.00
5,800.0	90.13	60.61	3,767.1	1,959.8	2,090.6	2,667.8	0.00	0.00	0.00
5,900.0	90.13	60.61	3,766.9	2,008.8	2,177.8	2,766.9	0.00	0.00	0.00
6,000.0	90.13	60.61	3,766.6	2,057.9	2,264.9	2,866.0	0.00	0.00	0.00
6,100.0	90.13	60.61	3,766.4	2,107.0	2,352.0	2,965.1	0.00	0.00	0.00
6,200.0	90.13	60.61	3,766.2	2,156.1	2,439.1	3,064.2	0.00	0.00	0.00
6,300.0	90.13	60.61	3,765.9	2,205.2	2,526.3	3,163.3	0.00	0.00	0.00
6,400.0	90.13	60.61	3,765.7	2,254.2	2,613.4	3,262.4	0.00	0.00	0.00
6,500.0	90.13	60.61	3,765.5	2,303.3	2,700.5	3,361.5	0.00	0.00	0.00
6,600.0	90.13	60.61	3,765.2	2,352.4	2,787.6	3,460.6	0.00	0.00	0.00
6,624.2	90.13	60.61	3,765.2	2,364.3	2,808.7	3,484.6	0.00	0.00	0.00
6,700.0	90.12	62.88	3,765.0	2,400.2	2,875.5	3,559.9	3.00	-0.01	3.00
6,800.0	90.11	65.88	3,764.8	2,443.4	2,965.6	3,659.7	3.00	-0.01	3.00
6,900.0	90.10	68.88	3,764.6	2,481.9	3,057.9	3,759.6	3.00	-0.01	3.00
7,000.0	90.09	71.88	3,764.5	2,515.4	3,152.1	3,859.6	3.00	-0.01	3.00
7,100.0	90.07	74.88	3,764.3	2,544.0	3,247.9	3,959.2	3.00	-0.01	3.00
7,200.0	90.06	77.88	3,764.2	2,567.6	3,345.1	4,058.1	3.00	-0.01	3.00
7,300.0	90.05	80.88	3,764.1	2,586.0	3,443.4	4,156.3	3.00	-0.01	3.00
7,400.0	90.03	83.88	3,764.1	2,599.3	3,542.5	4,253.2	3.00	-0.01	3.00
7,500.0	90.02	86.88	3,764.0	2,607.3	3,642.2	4,348.8	3.00	-0.01	3.00
7,600.0	90.00	89.88	3,764.0	2,610.2	3,742.1	4,442.7	3.00	-0.01	3.00
7,630.7	90.00	90.80	3,764.0	2,610.0	3,772.8	4,471.1	3.00	-0.01	3.00
7,700.0	90.00	90.80	3,764.0	2,609.0	3,842.1	4,535.1	0.00	0.00	0.00
7,800.0	90.00	90.80	3,764.0	2,607.6	3,942.1	4,627.5	0.00	0.00	0.00
7,900.0	90.00	90.80	3,764.0	2,606.2	4,042.1	4,719.9	0.00	0.00	0.00
8,000.0	90.00	90.80	3,764.0	2,604.8	4,142.1	4,812.2	0.00	0.00	0.00
8,100.0	90.00	90.80	3,764.0	2,603.4	4,242.1	4,904.6	0.00	0.00	0.00
8,200.0	90.00	90.80	3,764.0	2,602.0	4,342.0	4,996.9	0.00	0.00	0.00
8,300.0	90.00	90.80	3,764.0	2,600.6	4,442.0	5,089.3	0.00	0.00	0.00
8,400.0	90.00	90.80	3,764.0	2,599.2	4,542.0	5,181.7	0.00	0.00	0.00
8,500.0	90.00	90.80	3,764.0	2,597.8	4,642.0	5,274.0	0.00	0.00	0.00
8,600.0	90.00	90.80	3,764.0	2,596.4	4,742.0	5,366.4	0.00	0.00	0.00
8,700.0	90.00	90.80	3,764.0	2,595.0	4,842.0	5,458.8	0.00	0.00	0.00
8,800.0	90.00	90.80	3,764.0	2,593.6	4,942.0	5,551.1	0.00	0.00	0.00
8,900.0	90.00	90.80	3,764.0	2,592.3	5,042.0	5,643.5	0.00	0.00	0.00
9,000.0	90.00	90.80	3,764.0	2,590.9	5,142.0	5,735.9	0.00	0.00	0.00
9,100.0	90.00	90.80	3,764.0	2,589.5	5,242.0	5,828.2	0.00	0.00	0.00
9,200.0	90.00	90.80	3,764.0	2,588.1	5,342.0	5,920.6	0.00	0.00	0.00
9,300.0	90.00	90.80	3,764.0	2,586.7	5,441.9	6,012.9	0.00	0.00	0.00

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.1		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
9,400.0	90.00	90.80	3,764.0	2,585.3	5,541.9	6,105.3	0.00	0.00	0.00	
9,500.0	90.00	90.80	3,764.0	2,583.9	5,641.9	6,197.7	0.00	0.00	0.00	
9,600.0	90.00	90.80	3,764.0	2,582.5	5,741.9	6,290.0	0.00	0.00	0.00	
9,700.0	90.00	90.80	3,764.0	2,581.1	5,841.9	6,382.4	0.00	0.00	0.00	
9,800.0	90.00	90.80	3,764.0	2,579.7	5,941.9	6,474.8	0.00	0.00	0.00	
9,900.0	90.00	90.80	3,764.0	2,578.3	6,041.9	6,567.1	0.00	0.00	0.00	
10,000.0	90.00	90.80	3,764.0	2,576.9	6,141.9	6,659.5	0.00	0.00	0.00	
10,100.0	90.00	90.80	3,764.0	2,575.5	6,241.9	6,751.9	0.00	0.00	0.00	
10,200.0	90.00	90.80	3,764.0	2,574.1	6,341.9	6,844.2	0.00	0.00	0.00	
10,300.0	90.00	90.80	3,764.0	2,572.7	6,441.8	6,936.6	0.00	0.00	0.00	
10,310.7	90.00	90.80	3,764.0	2,572.6	6,452.5	6,946.5	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Lateral Pt. Lat.No.1 (Sol - hit/miss target - Shape - Point	0.00	0.00	3,746.4	2,611.4	3,647.7	2,186,255.30	559,400.20	37° 0' 28.896 N	107° 37' 47.630 W	- plan misses target center by 18.0usft at 7505.7usft MD (3764.0 TVD, 2607.6 N, 3647.8 E)
Landing Pt. (Southern U - plan misses target center by 27.8usft at 4947.2usft MD (3764.4 TVD, 1538.4 N, 1349.5 E) - Point	0.00	0.00	3,760.4	1,561.1	1,334.1	2,185,205.10	557,086.80	37° 0' 18.559 N	107° 38' 16.180 W	
Toe Lat No.1 Rev.1 (Sol - plan hits target center - Point	0.00	0.00	3,764.0	2,572.6	6,452.5	2,186,216.43	562,204.83	37° 0' 28.451 N	107° 37' 13.052 W	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,900.0	3,757.0	Top of Big Blue Seam		0.00		

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
4,717.0	3,696.9	1,390.9	1,188.8	Tie On @ 4717' MD	
4,757.0	3,713.5	1,418.4	1,212.6	Window @ 4757' MD	
5,022.8	3,768.9	1,578.3	1,413.5	EOB & SOH @ 5022.8' MD, 90.1° INC	
6,624.2	3,765.2	2,364.3	2,808.8	EOH & SOT @ 6624.2' MD, 3°/100' DLS	
7,630.7	3,764.0	2,610.0	3,772.8	EOT & SOH @ 7630.7' MD	
10,310.7	3,764.0	2,572.6	6,452.5	PBHL @ 10310.7' MD	

Sperry Drilling

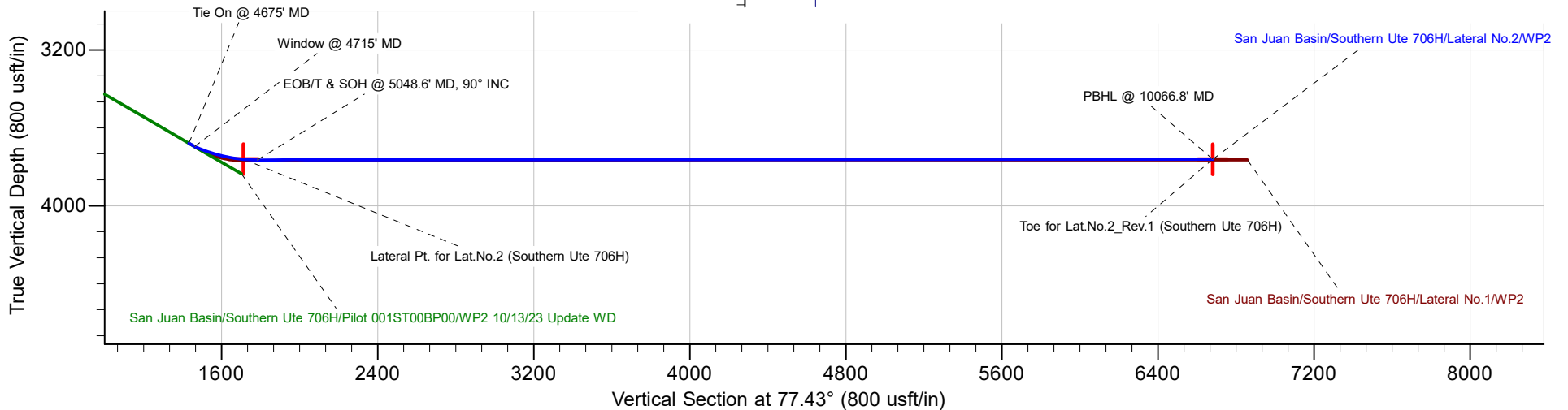
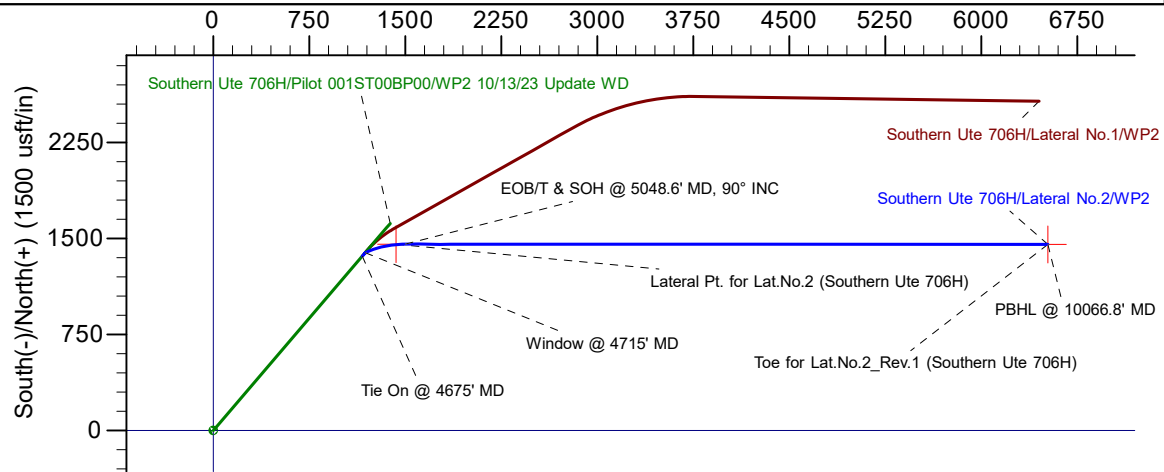
Project: Farmington, NM
 Site: San Juan Basin
 Well: Southern Ute 706H
 Wellbore: Lateral No.2
 Design: WP2

8:40, April 05 2024

PROJECT DETAILS: Farmington, NM	
Geodetic System: US State Plane 1927 (Exact solution)	
Datum: NAD 1927 (NADCON CONUS)	
Ellipsoid: Clarke 1866	
Zone: New Mexico West 3003	
System Datum: Mean Sea Level	

WP2										
Surface Location:										
Northing		Easting		Latitude		Longitude				
2183644.08		555752.80		37° 0' 3.150 N		107° 38' 32.665 W			GL: 7106.4usft	
Reference Elev'n:		15' RKB @ 7121.4usft								
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	4675.0	65.00	40.52	3679.1	1362.0	1164.0	0.0	0.0	1432.6	Tie On @ 4675' MD
2	4715.0	66.20	65.00	3695.6	1389.7	1187.7	3.00	0.00	1461.7	Window @ 4715' MD
3	5048.6	90.04	90.02	3764.9	1456.0	1502.1	10.20	49.10	1783.0	EOB/T & SOH @ 5048.6' MD, 90° INC
4	10066.8	90.04	90.02	3761.0	1454.2	6520.3	0.00	0.00	6680.5	PBHL @ 10066.8' MD
Target Details										
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape		
Lateral Pt. for Lat.No.2 (Southern Ute 706H)	3760.4	1455.6	1429.0	2185099.60	557181.70	37° 0' 17.514 N	107° 38' 15.012 W	Point		
Toe for Lat.No.2_Rev.1 (Southern Ute 706H)	3761.0	1454.2	6520.3	2185098.18	562272.60	37° 0' 17.391 N	107° 37' 12.248 W	Point		

BHL DETAILS	
MD:	10066.8ft
TVD:	3761ft
N/S:	1454.2ft
E/W:	6520.3ft
Northing:	2185098.18ft
Easting:	562272.61ft
Latitude:	37° 0' 17.391 N
Longitude:	107° 37' 12.248 W



Hilcorp Energy Company

**Farmington, NM
San Juan Basin
Southern Ute 706H**

Lateral No.2

Plan: WP2

Standard Planning Report - Geographic

05 April, 2024

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Project Farmington, NM			
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site San Juan Basin			
Site Position:		Northing:	2,186,723.60 usft
From:	Map	Easting:	570,736.10 usft
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "
		Latitude:	37° 0' 33.264 N
		Longitude:	107° 35' 27.852 W

Well Southern Ute 706H			
Well Position	+N/-S	0.0 usft	Northing:
	+E/-W	0.0 usft	2,183,644.08 usft
			Latitude:
			37° 0' 3.150 N
Position Uncertainty		1.0 usft	Easting:
			555,752.80 usft
			Longitude:
			107° 38' 32.665 W
Grid Convergence:		0.11 °	Wellhead Elevation:
			usft
			Ground Level:
			7,106.4 usft

Wellbore Lateral No.2					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	8/14/2023	8.63	63.37	49,442.28720861

Design WP2				
Audit Notes:				
Version:		Phase:	PLAN	Tie On Depth: 4,675.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	77.43

Plan Survey Tool Program		Date 4/5/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	4,675.0	10,066.8 WP2 (Lateral No.2)	3_MWD+HRGM	B001Mb: HRGM declination cc

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
4,675.0	65.00	40.52	3,679.1	1,362.0	1,164.0	0.00	0.00	0.00	0.00	
4,715.0	66.20	65.00	3,695.6	1,389.7	1,187.7	3.00	3.00	0.00	0.00	
5,048.6	90.04	90.02	3,764.9	1,456.0	1,502.1	10.20	7.15	7.50	49.10	
10,066.8	90.04	90.02	3,761.0	1,454.2	6,520.3	0.00	0.00	0.00	0.00	Toe for Lat.No.2_Rev.

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
0.0	0.00	0.00	0.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
100.0	0.00	0.00	100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
200.0	0.00	0.00	200.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
300.0	0.00	0.00	300.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
400.0	0.00	0.00	400.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
500.0	0.00	0.00	500.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
600.0	0.00	0.00	600.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
700.0	0.00	0.00	700.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
800.0	0.00	0.00	800.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
900.0	0.00	0.00	900.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,180.0	0.00	0.00	2,180.0	0.0	0.0	2,183,644.08	555,752.80	37° 0' 3.150 N	107° 38' 32.665 W	
2,200.0	1.10	40.52	2,200.0	0.1	0.1	2,183,644.22	555,752.93	37° 0' 3.151 N	107° 38' 32.664 W	
2,300.0	6.60	40.52	2,299.7	5.2	4.5	2,183,649.33	555,757.29	37° 0' 3.201 N	107° 38' 32.610 W	
2,400.0	12.10	40.52	2,398.4	17.6	15.0	2,183,661.67	555,767.84	37° 0' 3.323 N	107° 38' 32.479 W	
2,500.0	17.60	40.52	2,495.0	37.1	31.7	2,183,681.14	555,784.48	37° 0' 3.515 N	107° 38' 32.274 W	
2,600.0	23.10	40.52	2,588.7	63.5	54.3	2,183,707.57	555,807.07	37° 0' 3.776 N	107° 38' 31.995 W	
2,700.0	28.60	40.52	2,678.7	96.6	82.6	2,183,740.70	555,835.38	37° 0' 4.103 N	107° 38' 31.645 W	
2,800.0	34.10	40.52	2,764.0	136.2	116.4	2,183,780.23	555,869.17	37° 0' 4.494 N	107° 38' 31.227 W	
2,900.0	39.60	40.52	2,844.0	181.7	155.3	2,183,825.80	555,908.11	37° 0' 4.943 N	107° 38' 30.746 W	
3,000.0	45.10	40.52	2,917.9	232.9	199.1	2,183,876.98	555,951.86	37° 0' 5.449 N	107° 38' 30.205 W	
3,100.0	50.60	40.52	2,985.0	289.3	247.2	2,183,933.32	556,000.01	37° 0' 6.005 N	107° 38' 29.610 W	
3,200.0	56.10	40.52	3,044.7	350.2	299.3	2,183,994.28	556,052.11	37° 0' 6.606 N	107° 38' 28.966 W	
3,300.0	61.60	40.52	3,096.4	415.3	354.9	2,184,059.30	556,107.69	37° 0' 7.248 N	107° 38' 28.280 W	
3,361.8	65.00	40.52	3,124.1	457.2	390.8	2,184,101.28	556,143.56	37° 0' 7.663 N	107° 38' 27.836 W	
3,400.0	65.00	40.52	3,140.3	483.5	413.3	2,184,127.58	556,166.04	37° 0' 7.922 N	107° 38' 27.558 W	
3,500.0	65.00	40.52	3,182.5	552.4	472.2	2,184,196.47	556,224.92	37° 0' 8.602 N	107° 38' 26.831 W	
3,600.0	65.00	40.52	3,224.8	621.3	531.0	2,184,265.36	556,283.80	37° 0' 9.282 N	107° 38' 26.103 W	
3,700.0	65.00	40.52	3,267.1	690.2	589.9	2,184,334.25	556,342.68	37° 0' 9.962 N	107° 38' 25.376 W	
3,800.0	65.00	40.52	3,309.3	759.1	648.8	2,184,403.14	556,401.56	37° 0' 10.643 N	107° 38' 24.648 W	
3,900.0	65.00	40.52	3,351.6	828.0	707.7	2,184,472.03	556,460.44	37° 0' 11.323 N	107° 38' 23.920 W	
4,000.0	65.00	40.52	3,393.8	896.9	766.6	2,184,540.92	556,519.32	37° 0' 12.003 N	107° 38' 23.193 W	
4,100.0	65.00	40.52	3,436.1	965.8	825.5	2,184,609.81	556,578.20	37° 0' 12.683 N	107° 38' 22.465 W	
4,200.0	65.00	40.52	3,478.4	1,034.7	884.3	2,184,678.70	556,637.08	37° 0' 13.363 N	107° 38' 21.738 W	
4,300.0	65.00	40.52	3,520.6	1,103.6	943.2	2,184,747.59	556,695.96	37° 0' 14.043 N	107° 38' 21.010 W	
4,400.0	65.00	40.52	3,562.9	1,172.5	1,002.1	2,184,816.48	556,754.84	37° 0' 14.723 N	107° 38' 20.282 W	
4,500.0	65.00	40.52	3,605.2	1,241.4	1,061.0	2,184,885.37	556,813.72	37° 0' 15.403 N	107° 38' 19.555 W	
4,600.0	65.00	40.52	3,647.4	1,310.3	1,119.9	2,184,954.26	556,872.60	37° 0' 16.083 N	107° 38' 18.827 W	
4,675.0	65.00	40.52	3,679.1	1,362.0	1,164.0	2,185,005.93	556,916.76	37° 0' 16.593 N	107° 38' 18.281 W	
4,700.0	65.75	40.52	3,689.5	1,379.2	1,178.8	2,185,023.20	556,931.52	37° 0' 16.763 N	107° 38' 18.099 W	
4,715.0	66.20	65.00	3,695.6	1,389.7	1,187.7	2,185,033.62	556,940.42	37° 0' 16.866 N	107° 38' 17.989 W	
4,750.0	68.56	67.90	3,709.1	1,402.6	1,217.3	2,185,046.52	556,970.03	37° 0' 16.993 N	107° 38' 17.623 W	
4,800.0	72.02	71.88	3,726.0	1,418.7	1,261.5	2,185,062.68	557,014.22	37° 0' 17.152 N	107° 38' 17.078 W	
4,850.0	75.56	75.71	3,739.9	1,432.1	1,307.6	2,185,076.06	557,060.31	37° 0' 17.283 N	107° 38' 16.510 W	

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,900.0	79.16	79.41	3,750.9	1,442.6	1,355.2	2,185,086.55	557,107.93	37° 0' 17.386 N	107° 38' 15.922 W	
4,950.0	82.80	83.03	3,758.7	1,450.1	1,404.0	2,185,094.08	557,156.71	37° 0' 17.460 N	107° 38' 15.321 W	
5,000.0	86.47	86.59	3,763.4	1,454.6	1,453.6	2,185,098.58	557,206.27	37° 0' 17.503 N	107° 38' 14.710 W	
5,048.6	90.04	90.02	3,764.9	1,456.0	1,502.1	2,185,100.01	557,254.80	37° 0' 17.516 N	107° 38' 14.111 W	
5,100.0	90.04	90.02	3,764.8	1,456.0	1,553.5	2,185,099.99	557,306.20	37° 0' 17.515 N	107° 38' 13.477 W	
5,200.0	90.04	90.02	3,764.7	1,456.0	1,653.5	2,185,099.96	557,406.20	37° 0' 17.513 N	107° 38' 12.245 W	
5,300.0	90.04	90.02	3,764.7	1,456.0	1,753.5	2,185,099.92	557,506.19	37° 0' 17.510 N	107° 38' 11.012 W	
5,400.0	90.04	90.02	3,764.6	1,455.9	1,853.5	2,185,099.88	557,606.18	37° 0' 17.508 N	107° 38' 9.779 W	
5,500.0	90.04	90.02	3,764.5	1,455.9	1,953.5	2,185,099.85	557,706.17	37° 0' 17.505 N	107° 38' 8.546 W	
5,600.0	90.04	90.02	3,764.4	1,455.8	2,053.5	2,185,099.81	557,806.16	37° 0' 17.503 N	107° 38' 7.314 W	
5,700.0	90.04	90.02	3,764.4	1,455.8	2,153.5	2,185,099.77	557,906.16	37° 0' 17.501 N	107° 38' 6.081 W	
5,800.0	90.04	90.02	3,764.3	1,455.8	2,253.5	2,185,099.74	558,006.15	37° 0' 17.498 N	107° 38' 4.848 W	
5,900.0	90.04	90.02	3,764.2	1,455.7	2,353.5	2,185,099.70	558,106.14	37° 0' 17.496 N	107° 38' 3.615 W	
6,000.0	90.04	90.02	3,764.1	1,455.7	2,453.5	2,185,099.66	558,206.13	37° 0' 17.493 N	107° 38' 2.382 W	
6,100.0	90.04	90.02	3,764.1	1,455.7	2,553.5	2,185,099.63	558,306.12	37° 0' 17.491 N	107° 38' 1.150 W	
6,200.0	90.04	90.02	3,764.0	1,455.6	2,653.5	2,185,099.59	558,406.12	37° 0' 17.488 N	107° 37' 59.917 W	
6,300.0	90.04	90.02	3,763.9	1,455.6	2,753.5	2,185,099.55	558,506.11	37° 0' 17.486 N	107° 37' 58.684 W	
6,400.0	90.04	90.02	3,763.8	1,455.6	2,853.5	2,185,099.52	558,606.10	37° 0' 17.483 N	107° 37' 57.451 W	
6,500.0	90.04	90.02	3,763.8	1,455.5	2,953.5	2,185,099.48	558,706.09	37° 0' 17.481 N	107° 37' 56.218 W	
6,600.0	90.04	90.02	3,763.7	1,455.5	3,053.5	2,185,099.44	558,806.08	37° 0' 17.479 N	107° 37' 54.986 W	
6,700.0	90.04	90.02	3,763.6	1,455.4	3,153.5	2,185,099.41	558,906.08	37° 0' 17.476 N	107° 37' 53.753 W	
6,800.0	90.04	90.02	3,763.5	1,455.4	3,253.5	2,185,099.37	559,006.07	37° 0' 17.474 N	107° 37' 52.520 W	
6,900.0	90.04	90.02	3,763.4	1,455.4	3,353.5	2,185,099.34	559,106.06	37° 0' 17.471 N	107° 37' 51.287 W	
7,000.0	90.04	90.02	3,763.4	1,455.3	3,453.5	2,185,099.30	559,206.05	37° 0' 17.469 N	107° 37' 50.055 W	
7,100.0	90.04	90.02	3,763.3	1,455.3	3,553.5	2,185,099.26	559,306.04	37° 0' 17.466 N	107° 37' 48.822 W	
7,200.0	90.04	90.02	3,763.2	1,455.3	3,653.5	2,185,099.23	559,406.04	37° 0' 17.464 N	107° 37' 47.589 W	
7,300.0	90.04	90.02	3,763.1	1,455.2	3,753.5	2,185,099.19	559,506.03	37° 0' 17.461 N	107° 37' 46.356 W	
7,400.0	90.04	90.02	3,763.1	1,455.2	3,853.5	2,185,099.15	559,606.02	37° 0' 17.459 N	107° 37' 45.123 W	
7,500.0	90.04	90.02	3,763.0	1,455.2	3,953.5	2,185,099.12	559,706.01	37° 0' 17.456 N	107° 37' 43.891 W	
7,600.0	90.04	90.02	3,762.9	1,455.1	4,053.5	2,185,099.08	559,806.00	37° 0' 17.454 N	107° 37' 42.658 W	
7,700.0	90.04	90.02	3,762.8	1,455.1	4,153.5	2,185,099.04	559,906.00	37° 0' 17.451 N	107° 37' 41.425 W	
7,800.0	90.04	90.02	3,762.8	1,455.0	4,253.5	2,185,099.01	560,005.99	37° 0' 17.449 N	107° 37' 40.192 W	
7,900.0	90.04	90.02	3,762.7	1,455.0	4,353.5	2,185,098.97	560,105.98	37° 0' 17.446 N	107° 37' 38.959 W	
8,000.0	90.04	90.02	3,762.6	1,455.0	4,453.5	2,185,098.93	560,205.97	37° 0' 17.444 N	107° 37' 37.727 W	
8,100.0	90.04	90.02	3,762.5	1,454.9	4,553.5	2,185,098.90	560,305.96	37° 0' 17.441 N	107° 37' 36.494 W	
8,200.0	90.04	90.02	3,762.4	1,454.9	4,653.5	2,185,098.86	560,405.95	37° 0' 17.439 N	107° 37' 35.261 W	
8,300.0	90.04	90.02	3,762.4	1,454.9	4,753.5	2,185,098.82	560,505.95	37° 0' 17.436 N	107° 37' 34.028 W	
8,400.0	90.04	90.02	3,762.3	1,454.8	4,853.5	2,185,098.79	560,605.94	37° 0' 17.434 N	107° 37' 32.796 W	
8,500.0	90.04	90.02	3,762.2	1,454.8	4,953.5	2,185,098.75	560,705.93	37° 0' 17.431 N	107° 37' 31.563 W	
8,600.0	90.04	90.02	3,762.1	1,454.8	5,053.5	2,185,098.72	560,805.92	37° 0' 17.429 N	107° 37' 30.330 W	
8,700.0	90.04	90.02	3,762.1	1,454.7	5,153.5	2,185,098.68	560,905.91	37° 0' 17.426 N	107° 37' 29.097 W	
8,800.0	90.04	90.02	3,762.0	1,454.7	5,253.5	2,185,098.64	561,005.91	37° 0' 17.424 N	107° 37' 27.864 W	
8,900.0	90.04	90.02	3,761.9	1,454.6	5,353.5	2,185,098.61	561,105.90	37° 0' 17.421 N	107° 37' 26.632 W	
9,000.0	90.04	90.02	3,761.8	1,454.6	5,453.5	2,185,098.57	561,205.89	37° 0' 17.419 N	107° 37' 25.399 W	
9,100.0	90.04	90.02	3,761.8	1,454.6	5,553.5	2,185,098.53	561,305.88	37° 0' 17.416 N	107° 37' 24.166 W	
9,200.0	90.04	90.02	3,761.7	1,454.5	5,653.5	2,185,098.50	561,405.87	37° 0' 17.414 N	107° 37' 22.933 W	
9,300.0	90.04	90.02	3,761.6	1,454.5	5,753.5	2,185,098.46	561,505.87	37° 0' 17.411 N	107° 37' 21.701 W	
9,400.0	90.04	90.02	3,761.5	1,454.5	5,853.5	2,185,098.42	561,605.86	37° 0' 17.409 N	107° 37' 20.468 W	
9,500.0	90.04	90.02	3,761.4	1,454.4	5,953.5	2,185,098.39	561,705.85	37° 0' 17.406 N	107° 37' 19.235 W	
9,600.0	90.04	90.02	3,761.4	1,454.4	6,053.5	2,185,098.35	561,805.84	37° 0' 17.403 N	107° 37' 18.002 W	
9,700.0	90.04	90.02	3,761.3	1,454.4	6,153.5	2,185,098.31	561,905.83	37° 0' 17.401 N	107° 37' 16.769 W	
9,800.0	90.04	90.02	3,761.2	1,454.3	6,253.5	2,185,098.28	562,005.83	37° 0' 17.398 N	107° 37' 15.537 W	
9,900.0	90.04	90.02	3,761.1	1,454.3	6,353.5	2,185,098.24	562,105.82	37° 0' 17.396 N	107° 37' 14.304 W	
10,000.0	90.04	90.02	3,761.1	1,454.2	6,453.5	2,185,098.20	562,205.81	37° 0' 17.393 N	107° 37' 13.071 W	
10,066.8	90.04	90.02	3,761.0	1,454.2	6,520.3	2,185,098.18	562,272.61	37° 0' 17.391 N	107° 37' 12.248 W	

Halliburton

Planning Report - Geographic

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
Lateral Pt. for Lat.No.2 (	0.00	0.00	3,760.4	1,455.6	1,429.0	2,185,099.60	557,181.70	37° 0' 17.514 N	107° 38' 15.012 W
- plan misses target center by 3.1usft at 4975.4usft MD (3761.5 TVD, 1452.8 N, 1429.2 E)									
- Point									
Toe for Lat.No.2_Rev.1 (	0.00	0.00	3,761.0	1,454.2	6,520.3	2,185,098.18	562,272.61	37° 0' 17.391 N	107° 37' 12.248 W
- plan hits target center									
- Point									

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(usft)	(usft)			(°)	(°)
4,937.2	3,757.0	Top of Big Blue Seam		0.00	

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(usft)	(usft)	+N/-S	+E/-W		
		(usft)	(usft)		
4,675.0	3,679.1	1,362.0	1,164.0	Tie On @ 4675' MD	
4,715.0	3,695.6	1,389.7	1,187.7	Window @ 4715' MD	
5,048.6	3,764.9	1,456.0	1,502.1	EOB/T & SOH @ 5048.6' MD, 90° INC	
10,066.8	3,761.0	1,454.2	6,520.3	PBHL @ 10066.8' MD	

Hilcorp Energy Company

**Farmington, NM
San Juan Basin
Southern Ute 706H**

Lateral No.2

Plan: WP2

Standard Planning Report

05 April, 2024

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Project	Farmington, NM		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		Using geodetic scale factor

Site	San Juan Basin				
Site Position:	Northing:	2,186,723.60 usft	Latitude:	37° 0' 33.264 N	
From:	Map	Easting:	570,736.10 usft	Longitude:	107° 35' 27.852 W
Position Uncertainty:	5.0 usft	Slot Radius:	13-3/16 "		

Well	Southern Ute 706H					
Well Position	+N/-S	0.0 usft	Northing:	2,183,644.08 usft	Latitude:	37° 0' 3.150 N
	+E/-W	0.0 usft	Easting:	555,752.80 usft	Longitude:	107° 38' 32.665 W
Position Uncertainty		1.0 usft	Wellhead Elevation:	usft	Ground Level:	7,106.4 usft
Grid Convergence:		0.11 °				

Wellbore	Lateral No.2				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2023	8/14/2023	8.63	63.37	49,442.28720861

Design	WP2				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	4,675.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	77.43	

Plan Survey Tool Program	Date	4/5/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	4,675.0	10,066.8	WP2 (Lateral No.2)	3_MWD+HRGM	B001Mb: HRGM declination co

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
4,675.0	65.00	40.52	3,679.1	1,362.0	1,164.0	0.00	0.00	0.00	0.00	
4,715.0	66.20	65.00	3,695.6	1,389.7	1,187.7	3.00	3.00	0.00	0.00	
5,048.6	90.04	90.02	3,764.9	1,456.0	1,502.1	10.20	7.15	7.50	49.10	
10,066.8	90.04	90.02	3,761.0	1,454.2	6,520.3	0.00	0.00	0.00	0.00	Toe for Lat.No.2_Rev.

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	0.00
2,180.0	0.00	0.00	2,180.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0	1.10	40.52	2,200.0	0.1	0.1	0.2	5.50	5.50	0.00
2,300.0	6.60	40.52	2,299.7	5.2	4.5	5.5	5.50	5.50	0.00
2,400.0	12.10	40.52	2,398.4	17.6	15.0	18.5	5.50	5.50	0.00
2,500.0	17.60	40.52	2,495.0	37.1	31.7	39.0	5.50	5.50	0.00
2,600.0	23.10	40.52	2,588.7	63.5	54.3	66.8	5.50	5.50	0.00
2,700.0	28.60	40.52	2,678.7	96.6	82.6	101.6	5.50	5.50	0.00
2,800.0	34.10	40.52	2,764.0	136.2	116.4	143.2	5.50	5.50	0.00
2,900.0	39.60	40.52	2,844.0	181.7	155.3	191.2	5.50	5.50	0.00
3,000.0	45.10	40.52	2,917.9	232.9	199.1	245.0	5.50	5.50	0.00
3,100.0	50.60	40.52	2,985.0	289.3	247.2	304.3	5.50	5.50	0.00
3,200.0	56.10	40.52	3,044.7	350.2	299.3	368.4	5.50	5.50	0.00
3,300.0	61.60	40.52	3,096.4	415.3	354.9	436.8	5.50	5.50	0.00
3,361.8	65.00	40.52	3,124.1	457.2	390.8	480.9	5.50	5.50	0.00
3,400.0	65.00	40.52	3,140.3	483.5	413.3	508.6	0.00	0.00	0.00
3,500.0	65.00	40.52	3,182.5	552.4	472.2	581.1	0.00	0.00	0.00
3,600.0	65.00	40.52	3,224.8	621.3	531.0	653.6	0.00	0.00	0.00
3,700.0	65.00	40.52	3,267.1	690.2	589.9	726.0	0.00	0.00	0.00
3,800.0	65.00	40.52	3,309.3	759.1	648.8	798.5	0.00	0.00	0.00
3,900.0	65.00	40.52	3,351.6	828.0	707.7	871.0	0.00	0.00	0.00
4,000.0	65.00	40.52	3,393.8	896.9	766.6	943.4	0.00	0.00	0.00
4,100.0	65.00	40.52	3,436.1	965.8	825.5	1,015.9	0.00	0.00	0.00
4,200.0	65.00	40.52	3,478.4	1,034.7	884.3	1,088.4	0.00	0.00	0.00
4,300.0	65.00	40.52	3,520.6	1,103.6	943.2	1,160.8	0.00	0.00	0.00
4,400.0	65.00	40.52	3,562.9	1,172.5	1,002.1	1,233.3	0.00	0.00	0.00
4,500.0	65.00	40.52	3,605.2	1,241.4	1,061.0	1,305.8	0.00	0.00	0.00
4,600.0	65.00	40.52	3,647.4	1,310.3	1,119.9	1,378.2	0.00	0.00	0.00
4,675.0	65.00	40.52	3,679.1	1,362.0	1,164.0	1,432.6	0.00	0.00	0.00
4,700.0	65.75	40.52	3,689.5	1,379.2	1,178.8	1,450.8	3.00	3.00	0.00
4,715.0	66.20	65.00	3,695.6	1,389.7	1,187.7	1,461.7	148.90	3.00	163.20
4,750.0	68.56	67.90	3,709.1	1,402.6	1,217.3	1,493.4	10.20	6.75	8.28
4,800.0	72.02	71.88	3,726.0	1,418.7	1,261.5	1,540.1	10.20	6.92	7.96

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,850.0	75.56	75.71	3,739.9	1,432.1	1,307.6	1,588.0	10.20	7.07	7.65	
4,900.0	79.16	79.41	3,750.9	1,442.6	1,355.2	1,636.7	10.20	7.19	7.41	
4,950.0	82.80	83.03	3,758.7	1,450.1	1,404.0	1,686.0	10.20	7.28	7.23	
5,000.0	86.47	86.59	3,763.4	1,454.6	1,453.6	1,735.4	10.20	7.34	7.12	
5,048.6	90.04	90.02	3,764.9	1,456.0	1,502.1	1,783.0	10.20	7.36	7.06	
5,100.0	90.04	90.02	3,764.8	1,456.0	1,553.5	1,833.2	0.00	0.00	0.00	
5,200.0	90.04	90.02	3,764.7	1,456.0	1,653.5	1,930.8	0.00	0.00	0.00	
5,300.0	90.04	90.02	3,764.7	1,456.0	1,753.5	2,028.4	0.00	0.00	0.00	
5,400.0	90.04	90.02	3,764.6	1,455.9	1,853.5	2,126.0	0.00	0.00	0.00	
5,500.0	90.04	90.02	3,764.5	1,455.9	1,953.5	2,223.6	0.00	0.00	0.00	
5,600.0	90.04	90.02	3,764.4	1,455.8	2,053.5	2,321.2	0.00	0.00	0.00	
5,700.0	90.04	90.02	3,764.4	1,455.8	2,153.5	2,418.8	0.00	0.00	0.00	
5,800.0	90.04	90.02	3,764.3	1,455.8	2,253.5	2,516.4	0.00	0.00	0.00	
5,900.0	90.04	90.02	3,764.2	1,455.7	2,353.5	2,614.0	0.00	0.00	0.00	
6,000.0	90.04	90.02	3,764.1	1,455.7	2,453.5	2,711.6	0.00	0.00	0.00	
6,100.0	90.04	90.02	3,764.1	1,455.7	2,553.5	2,809.1	0.00	0.00	0.00	
6,200.0	90.04	90.02	3,764.0	1,455.6	2,653.5	2,906.7	0.00	0.00	0.00	
6,300.0	90.04	90.02	3,763.9	1,455.6	2,753.5	3,004.3	0.00	0.00	0.00	
6,400.0	90.04	90.02	3,763.8	1,455.6	2,853.5	3,101.9	0.00	0.00	0.00	
6,500.0	90.04	90.02	3,763.8	1,455.5	2,953.5	3,199.5	0.00	0.00	0.00	
6,600.0	90.04	90.02	3,763.7	1,455.5	3,053.5	3,297.1	0.00	0.00	0.00	
6,700.0	90.04	90.02	3,763.6	1,455.4	3,153.5	3,394.7	0.00	0.00	0.00	
6,800.0	90.04	90.02	3,763.5	1,455.4	3,253.5	3,492.3	0.00	0.00	0.00	
6,900.0	90.04	90.02	3,763.4	1,455.4	3,353.5	3,589.9	0.00	0.00	0.00	
7,000.0	90.04	90.02	3,763.4	1,455.3	3,453.5	3,687.5	0.00	0.00	0.00	
7,100.0	90.04	90.02	3,763.3	1,455.3	3,553.5	3,785.1	0.00	0.00	0.00	
7,200.0	90.04	90.02	3,763.2	1,455.3	3,653.5	3,882.7	0.00	0.00	0.00	
7,300.0	90.04	90.02	3,763.1	1,455.2	3,753.5	3,980.3	0.00	0.00	0.00	
7,400.0	90.04	90.02	3,763.1	1,455.2	3,853.5	4,077.9	0.00	0.00	0.00	
7,500.0	90.04	90.02	3,763.0	1,455.2	3,953.5	4,175.5	0.00	0.00	0.00	
7,600.0	90.04	90.02	3,762.9	1,455.1	4,053.5	4,273.1	0.00	0.00	0.00	
7,700.0	90.04	90.02	3,762.8	1,455.1	4,153.5	4,370.7	0.00	0.00	0.00	
7,800.0	90.04	90.02	3,762.8	1,455.0	4,253.5	4,468.3	0.00	0.00	0.00	
7,900.0	90.04	90.02	3,762.7	1,455.0	4,353.5	4,565.8	0.00	0.00	0.00	
8,000.0	90.04	90.02	3,762.6	1,455.0	4,453.5	4,663.4	0.00	0.00	0.00	
8,100.0	90.04	90.02	3,762.5	1,454.9	4,553.5	4,761.0	0.00	0.00	0.00	
8,200.0	90.04	90.02	3,762.4	1,454.9	4,653.5	4,858.6	0.00	0.00	0.00	
8,300.0	90.04	90.02	3,762.4	1,454.9	4,753.5	4,956.2	0.00	0.00	0.00	
8,400.0	90.04	90.02	3,762.3	1,454.8	4,853.5	5,053.8	0.00	0.00	0.00	
8,500.0	90.04	90.02	3,762.2	1,454.8	4,953.5	5,151.4	0.00	0.00	0.00	
8,600.0	90.04	90.02	3,762.1	1,454.8	5,053.5	5,249.0	0.00	0.00	0.00	
8,700.0	90.04	90.02	3,762.1	1,454.7	5,153.5	5,346.6	0.00	0.00	0.00	
8,800.0	90.04	90.02	3,762.0	1,454.7	5,253.5	5,444.2	0.00	0.00	0.00	
8,900.0	90.04	90.02	3,761.9	1,454.6	5,353.5	5,541.8	0.00	0.00	0.00	
9,000.0	90.04	90.02	3,761.8	1,454.6	5,453.5	5,639.4	0.00	0.00	0.00	
9,100.0	90.04	90.02	3,761.8	1,454.6	5,553.5	5,737.0	0.00	0.00	0.00	
9,200.0	90.04	90.02	3,761.7	1,454.5	5,653.5	5,834.6	0.00	0.00	0.00	
9,300.0	90.04	90.02	3,761.6	1,454.5	5,753.5	5,932.2	0.00	0.00	0.00	
9,400.0	90.04	90.02	3,761.5	1,454.5	5,853.5	6,029.8	0.00	0.00	0.00	
9,500.0	90.04	90.02	3,761.4	1,454.4	5,953.5	6,127.4	0.00	0.00	0.00	
9,600.0	90.04	90.02	3,761.4	1,454.4	6,053.5	6,225.0	0.00	0.00	0.00	
9,700.0	90.04	90.02	3,761.3	1,454.4	6,153.5	6,322.5	0.00	0.00	0.00	
9,800.0	90.04	90.02	3,761.2	1,454.3	6,253.5	6,420.1	0.00	0.00	0.00	
9,900.0	90.04	90.02	3,761.1	1,454.3	6,353.5	6,517.7	0.00	0.00	0.00	

Halliburton

Planning Report

Database:	EDM 5000.17 Single User Db	Local Co-ordinate Reference:	Well Southern Ute 706H
Company:	Hilcorp Energy Company	TVD Reference:	15' RKB @ 7121.4usft
Project:	Farmington, NM	MD Reference:	15' RKB @ 7121.4usft
Site:	San Juan Basin	North Reference:	Grid
Well:	Southern Ute 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Lateral No.2		
Design:	WP2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
10,000.0	90.04	90.02	3,761.1	1,454.2	6,453.5	6,615.3	0.00	0.00	0.00	
10,066.8	90.04	90.02	3,761.0	1,454.2	6,520.3	6,680.5	0.00	0.00	0.00	

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
Lateral Pt. for Lat.No.2 (	0.00	0.00	3,760.4	1,455.6	1,429.0	2,185,099.60	557,181.70	37° 0' 17.514 N	107° 38' 15.012 W	
- hit/miss target										
- plan misses target center by 3.1usft at 4975.4usft MD (3761.5 TVD, 1452.8 N, 1429.2 E)										
- Shape										
- Point										
Toe for Lat.No.2_Rev.1 (	0.00	0.00	3,761.0	1,454.2	6,520.3	2,185,098.18	562,272.61	37° 0' 17.391 N	107° 37' 12.248 W	
- plan hits target center										
- Point										

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
4,937.2	3,757.0	Top of Big Blue Seam		0.00		

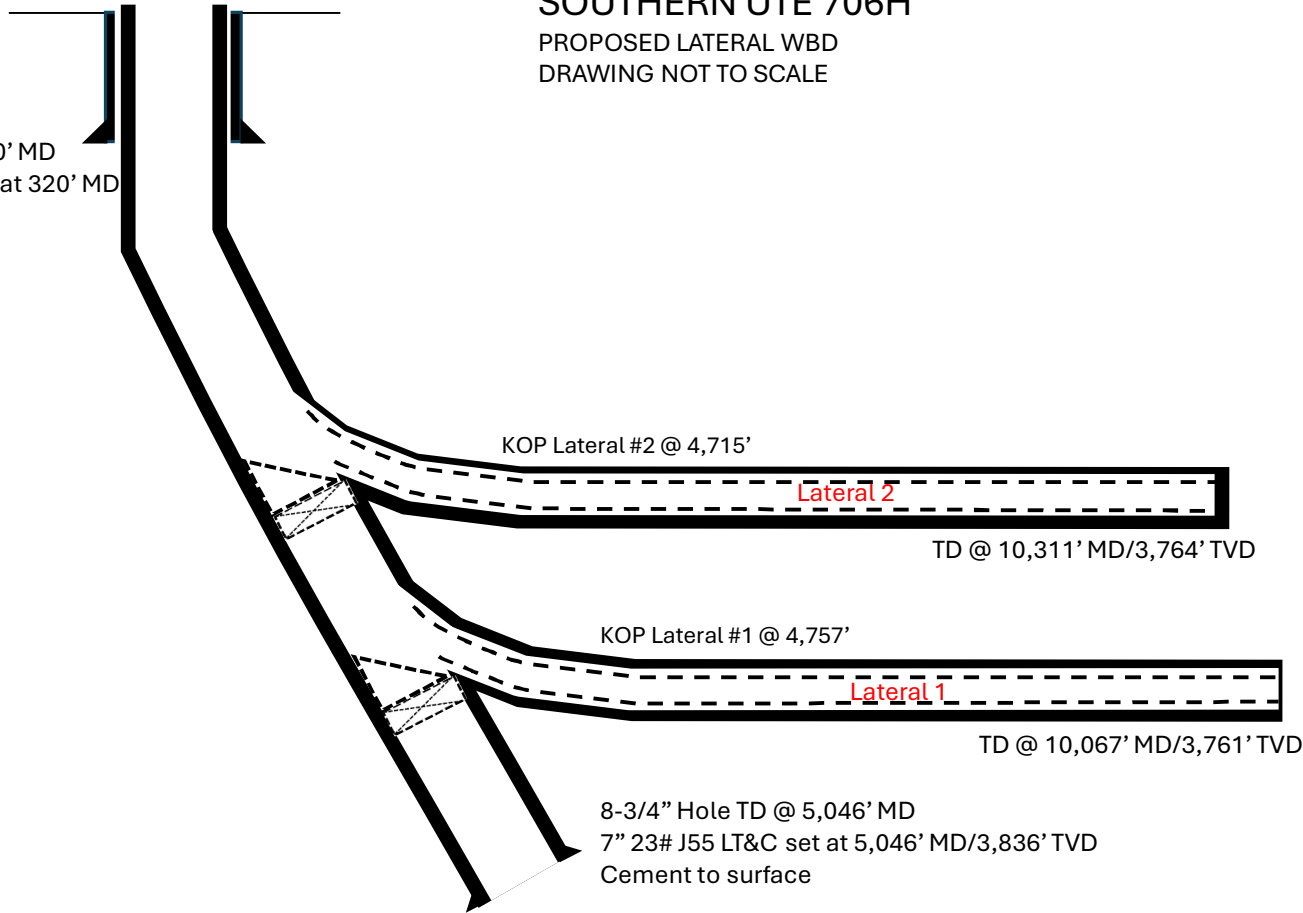
Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
4,675.0	3,679.1	1,362.0	1,164.0	Tie On @ 4675' MD	
4,715.0	3,695.6	1,389.7	1,187.7	Window @ 4715' MD	
5,048.6	3,764.9	1,456.0	1,502.1	EOB/T & SOH @ 5048.6' MD, 90° INC	
10,066.8	3,761.0	1,454.2	6,520.3	PBHL @ 10066.8' MD	

SOUTHERN UTE 706H

PROPOSED LATERAL WBD
DRAWING NOT TO SCALE

State: CO
County: La Plata
API:
GL: 7,106'
KB: 15'

12-1/4" Surface Hole to 320' MD
9-5/8" 32.3# H40 ST&C set at 320' MD
Cement to surface



All Laterals:
6-1/4" Hole
4-1/2" 11.6# L80 LT&C casing
Pre-Perforated Drop-off liner

Formation	MD
OJO	3,186'
KIRTLAND	3,324'
FRUITLAND	3,408'

Bore Name	Window Top	Window Bot	Bridge Plug	KOP Method	KOP (MD)	KOP (TVD)	Top of Production T-32-NR-7-W	Top of KOP T-32-NR-7-W	Total Depth MD	Total Depth TVD	Liner Bot	Liner Top	Proposed BHL T-32-NR-7-W
Pilot	N/A	N/A	N/A	Motor	2180	2180	350' FSL & 499' FEL (19)	350' FSL & 499' FEL (19)	5046	3836	N/A	N/A	1810' FNL & 940' FWL (20)
Lateral 1	4747	4757	4772	Whipstock	4757	3796	1009' FNL & 723' FWL (20)	1009' FNL & 723' FWL (20)	10311	3764	10311	4757	645' FNL & 686' FEL (21)
Lateral 2	4705	4715	4730	Whipstock	4715	3714	1037' FNL & 749' FWL (20)	1037' FNL & 749' FWL (20)	10067	3761	10067	4715	1765' FNL & 697' FEL (21)



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:

- APD Change
- Sundry ID: **2834429**

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

I. GENERAL

- A.** All previous COA remain in effect. 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 48 hours in advance prior to the following:
- Well Spud/Rig Up
 - Running and/or cementing casing
 - Submit a cement evaluation log if cement is not circulated to surface.
 - BOP test
 - 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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- 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.
- G.** If Flex hoses are to be used during drilling operations, a variance request via sundry notice must be submitted. Manufacturer specification and test must be submitted with sundry.

III. PHONE NUMBERS

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