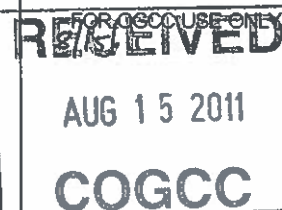


FORM
15
Rev 6/99

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109



EARTHEN PIT REPORT/PERMIT

This form is to be used for both reporting and permitting pits. Rule 903 describes when a Permit with prior approval, or a Report within 30 days, is required for pits. Submit required attachments and forms.

Complete the
Attachment Checklist

FORM SUBMITTED FOR:

☐ Pit Report☒ Pit Permit

Oper OGCC

Detailed Site Plan	✓	
Topo Map w/ Pit Location	✓	
Water Analysis (Form 25)		
Source Wells (Form 26)		
Pit Design/Plan & Cross Sec	✓	
Design Calculations	✓	
Sensitive Area Determ.	✓	
Mud Program	✓	
Form 2A	✓	

OGCC Operator Number: 78110

Name of Operator: SWEPI LP

Address: 4582 S. Ulster St. Parkway, Suite 1400

City: Denver State: CO Zip: 80237

Contact Name and Telephone:

Michael L. Bergstrom

No: 303-222-6347

Fax: 303-222-6358

API Number (of associated well): Application Submitted Lot 9 OGCC Facility ID (of other associated facility):

Pit Location (QtrQtr, Sec, Twp, Rng, Meridian): NESE Sec 29 T6N R89W 6th P.M.

Latitude: 40.445739 Longitude: -107.392506 County: Routt

Pit Use: ☐ Production ☒ Drilling (Attach mud program) ☐ Special Purpose (Describe Use): Blooie pit used for water-based cuttingsPit Type: ☒ Lined ☐ Unlined Surface Discharge Permit: ☐ Yes ☒ NoOffsite disposal of pit contents: ☐ Injection ☒ Commercial Pit/Facility Name: Gnat Hill Pit/Facility No: 1-29

Attach Form 26 to identify Source Wells and Form 25 to provide Produced Water Analysis results.

Existing Site Conditions

Is the location in a "Sensitive Area?" ☒ Yes ☒ No Attach data used for determination.

Distance (in feet) to nearest surface water: 453' ground water: 15' water wells: 10,262'

LAND USE (or attach copy of Form 2A if previously submitted for associated well) Select one which best describes land use:

Crop Land: ☐ Irrigated ☐ Dry Land ☐ Improved Pasture ☐ Hay Meadow ☐ CRPNon-Crop Land: ☒ Rangeland☐ Timber☐ Recreational☐ Other (describe):Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

SOILS (or attach copy of Form 2A if previously submitted for associated well)

Soil map units from USNRCS survey: Sheet No: Website Soil Complex/Series No: 10C

Soils Series Name: Bulkley Silty Clay Horizon thickness (in inches): A: ; B: ; C:

Soils Series Name: Horizon thickness (in inches): A: ; B: ; C:

Attach detailed site plan and topo map with pit location.

Pit Design and Construction

Size of pit (feet): Length: 40' Width: 45' Depth: 10'

Calculated pit volume (bbls): 920 bbls Daily inflow rate (bbls/day): varies

Daily disposal rates (attach calculations): Evaporation: N/A bbls/day Percolation: 0 bbls/day

Type of liner material: HDPE Thickness: 30 mm

Attach description of proposed design and construction (include sketches and calculations).

Method of treatment of produced water prior to discharge into pit (separator, heater treater, other): none / not applicable

Is pit fenced? ☒ Yes ☐ No Is pit netted? ☒ Yes ☐ No

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Michael L. Bergstrom

Signed: Michael L. Bergstrom

Title: Senior Regulatory Advisor

Date: 8/9/2011

OGCC Approved: David Kulezko

Title: Location Assessment Specialist Date: 8-23-11

CONDITIONS OF APPROVAL, IF ANY: See Attached Sheet

FACILITY NUMBER: 424748

SWEPI LP, Gnat Hill 1-29 Pad, Lot 9 (NESE) Sec 29 T6N R89W, Routt County, Form 15 Pit Permit Conditions of Approval, Associated Form 2A#400190332; Pit Facility ID#424748.

COA 11 - The drilling pit must be lined, or a closed loop system must be implemented during drilling. All cuttings generated during drilling with OBM must be kept in the lined drilling pit, or placed either in containers or on a lined/bermed portion of the well pad; prior to offsite disposal. The moisture content of any drill cuttings in a cuttings container or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.

COA 5 - Operator must implement best management practices to contain any unintentional release of fluids.

COA 90 - Notify COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to start of construction of the pit.

COA 49 - The operator must maintain the fencing and netting until the pit is closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels.

COA 91 - At the time of pit closure, operator must submit disposal information for pit contents via a Form 4 Sundry Notice to the COGCC Location Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us). The disposal method will need to be approved prior to operator starting pit closure.



Shell Exploration & Production

State of Colorado
Department of Natural Resources
Oil and Gas Conservation Commission
1120 Lincoln Street, Suite 801
Denver, Colorado 80203

Shell Exploration & Production Co.

Regulatory Affairs-EP Americas
4582 S. Ulster Street Parkway
Suite 1400
Denver, Colorado 80237



August 9, 2011

Subject: Earthen Pit Permit
Shell Exploration & Production Co., Gnat Hill 1-29
Routt County, Colorado

Ladies and Gentlemen:

Shell Exploration & Production Company (Shell), as service provider to SWEPI LP in Colorado, requests that Colorado Oil and Gas Conservation Commission (COGCC) review and approve the Earthen Pit Permit (Form 15) for the subject well and location. The Oil and Gas Location Assessment (Form 2A) for the subject well and well location is being submitted electronically.

This exploration well is located in an area that has limited existing oil & gas production, and is targeting prospective zones that have been the subject of limited exploration. Shell considers this well to be an exploration well. Shell plans to begin construction of this well location on or about October 1, 2011 and begin drilling and completion activities for this well, on or about October 15, 2011.

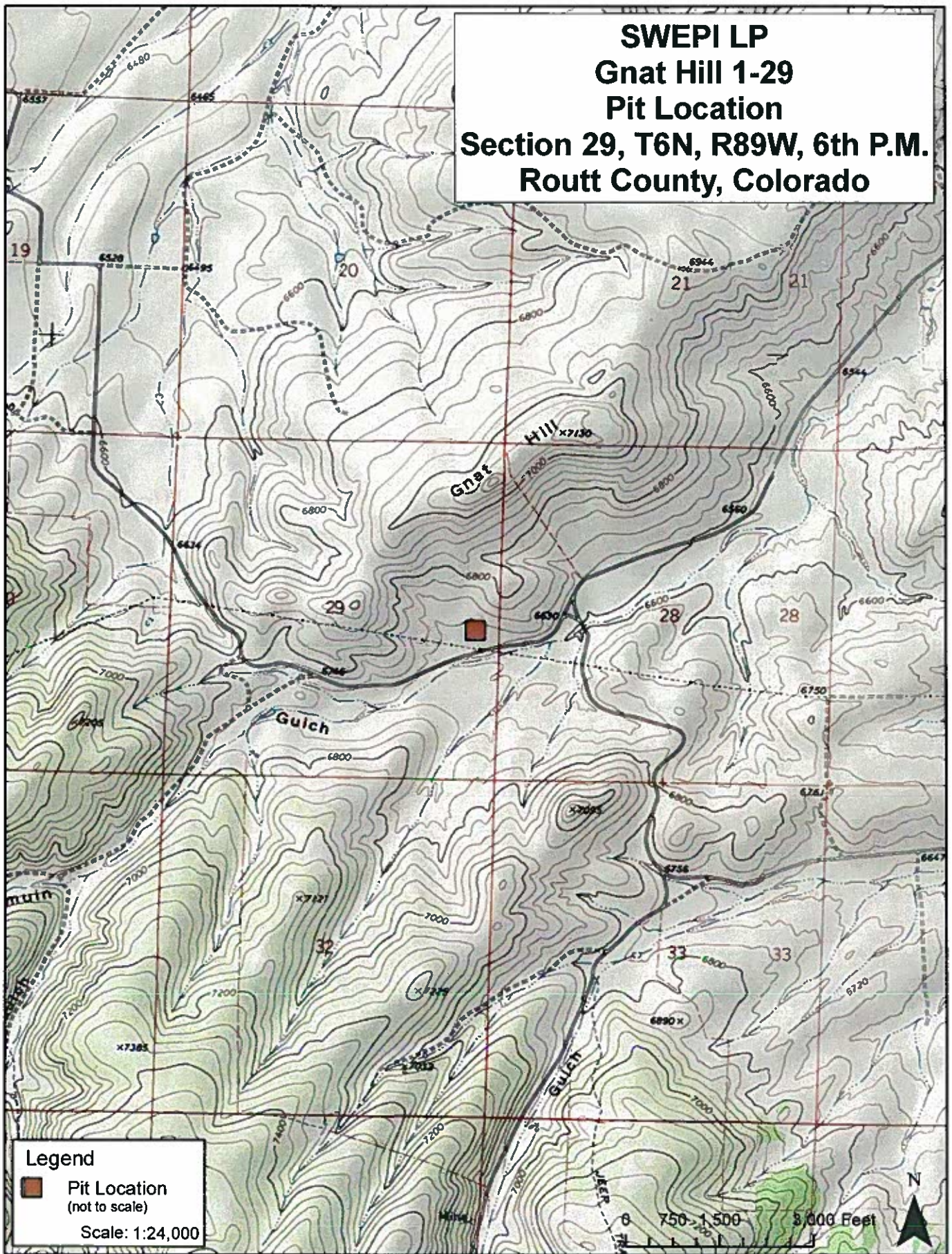
If you have any questions or require any additional information regarding this permit application, please contact me at (303) 222-6347, or Aleta Brown at Norwest in Salt Lake City at (801) 539-0044.

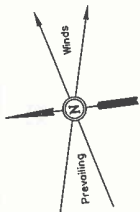
Regards,

Michael L. Bergstrom
Senior Regulatory Advisor
Shell Exploration & Production Company

Attachments: Form 15 w/attachments

SWEPI LP
Gnat Hill 1-29
Pit Location
Section 29, T6N, R89W, 6th P.M.
Routt County, Colorado

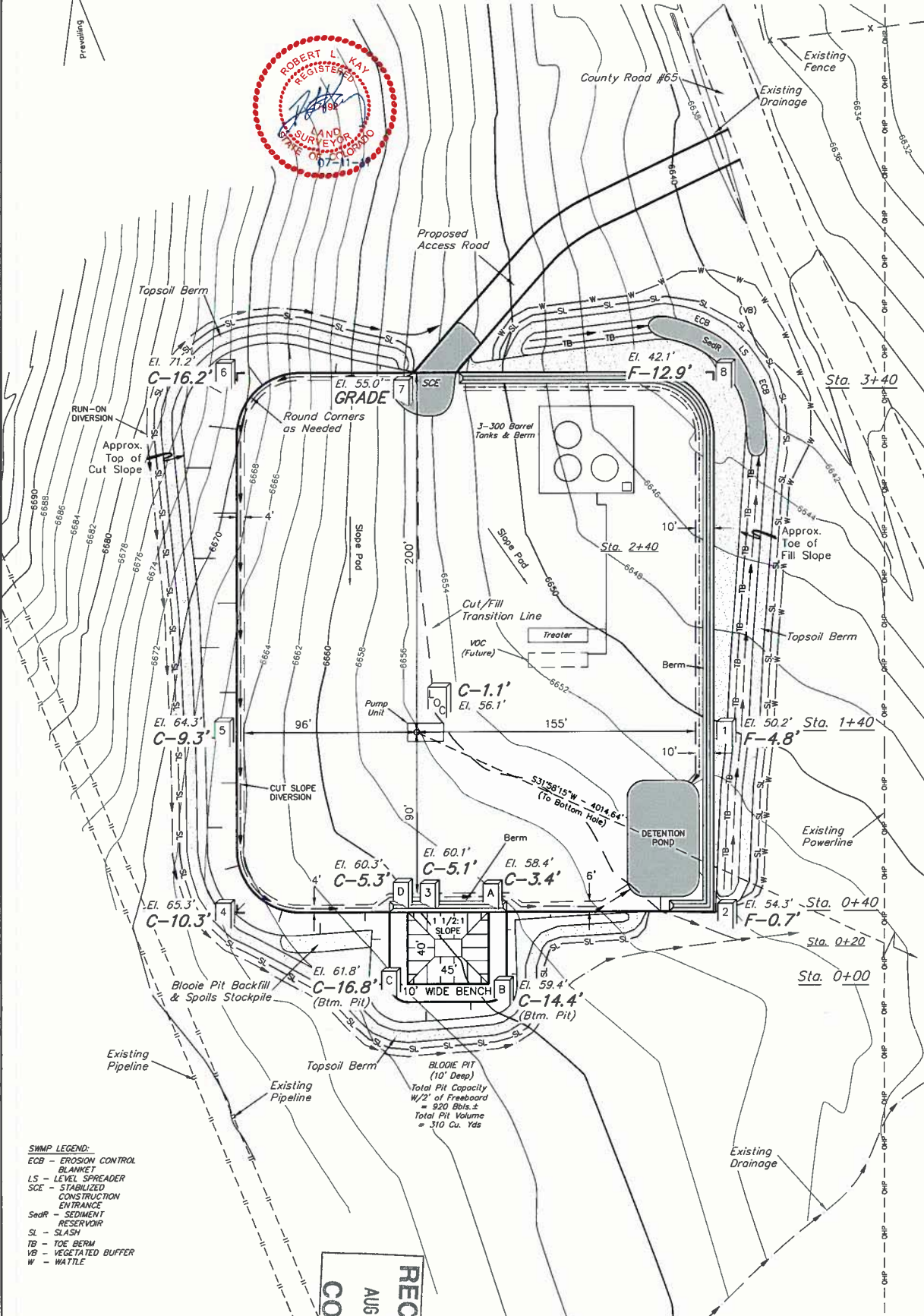




SWEPI LP
CONSTRUCTION LAYOUT FOR
GNAT HILL #1-29
SECTION 29, T6N, R89W, 6th. P.M.
2374' FSL 360' FEL

FIGURE #1

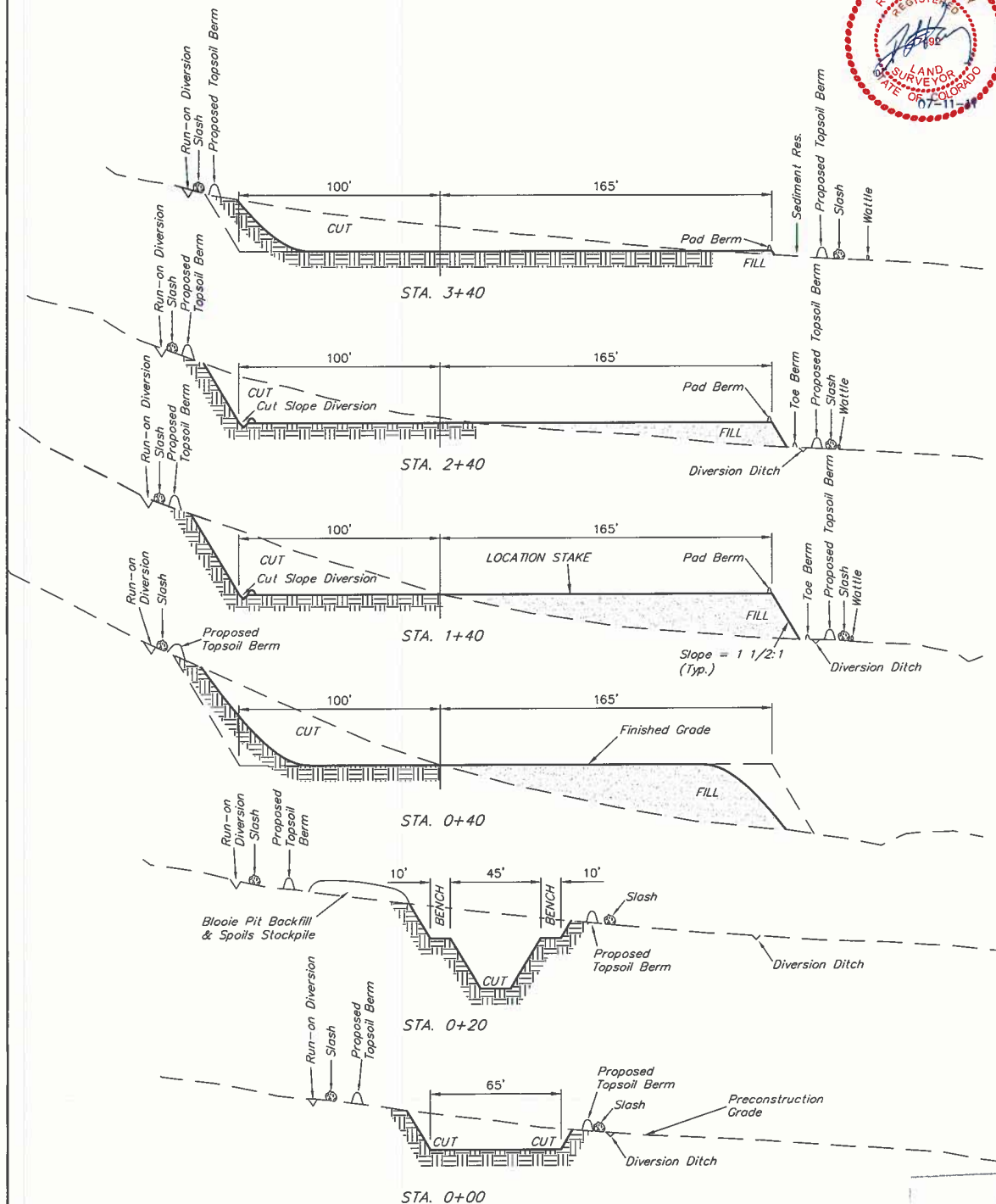
SCALE: 1" = 50'
DATE: 07-07-11
DRAWN BY: J.I.



X-Section
Scale
1" = 50'
DATE: 07-07-11
DRAWN BY: J.J.

SWEPI LP
CONSTRUCTION LAYOUT CROSS SECTIONS FOR
GNAT HILL #1-29
SECTION 29, T6N, R89W, 6th. P.M.
2374' FSL 360' FEL

FIGURE #2



NOTE:
Topsoil should not be
Stripped Below Finished
Grade on Substructure Area.

* NOTE:
FILL QUANTITY INCLUDES
5% FOR COMPACTION

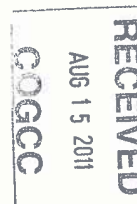
APPROXIMATE YARDAGES

(6") Topsoil Stripping = 1,860 Cu. Yds.
Remaining Location = 8,960 Cu. Yds.
TOTAL CUT = 10,820 CU.YDS.
FILL = 8,800 CU.YDS.

EXCESS MATERIAL = 2,020 Cu. Yds.
Topsoil & Pit Backfill = 2,020 Cu. Yds.
(1/2 Pit Vol.)
EXCESS UNBALANCE = 0 Cu. Yds.
(After Interim Rehabilitation)

APPROXIMATE ACREAGES
WELL SITE DISTURBANCE = ± 2.378 ACRES
ACCESS ROAD DISTURBANCE = ± 0.147 ACRES
TOTAL = ± 2.525 ACRES

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1017



Colorado Department of Natural Resources

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Colorado Division of Water Resources

Colorado's Well Permit Search

Well Constructed

Help

Last Refresh: 7/29/2011 12:02:03 AM

Receipt: 9120593 **Division:** 6
Permit #: 70847- - **Water District:** 57
Well Name / #: **County:** ROUTT
Designated Basin: **Management District:**
Case Number:
WDID:



[-] Applicant/Owners History

Date Range	Applicant/Owner Name	Address	City/State/Zip
Unknown - Present	STATE BOARD OF LAND COMMISSIONERS	1127 Sherman St. #300	Denver, CO 80203

[-] Location Information

Approved Well Location:

Q40	Q160	Section	Township	Range	PM	Footage from Section Lines
NW	NW	31	6.0N	89.0W	Sixth	605 N 380 W

Northing (UTM y): 4479131.5 **Easting (UTM x):** 294090.7

Location Accuracy: Spotted from section lines

Physical Address

Subdivision Name

City/State/Zip

Filing Block Lot

Parcel ID:

Acres in Tract:

[-] Permit Details

Date Issued: 08/23/1973

Date Expires:

Use(s): DOMESTIC

Aquifer (s): ALL UNNAMED AQUIFERS

Special Use:

Area which may be irrigated: 1 acres

Maximum annual volume of appropriation:

Statute:

Permit Requirements:

Totalizing Flow Meter
No

Geophysical Log
No

Abandonment Report
No

Cross Reference **Permit Number** **Receipt** **Description**

Permit(s): [70847- -A](#) [0010651](#)

Comments:

[-] Construction/Usage Details

Well Construction Date: 07/26/1973

Pump Installation Date:

Well Plugged:

1st Beneficial Use: 07/16/1973

Elevation	Depth	Perforated Casing (Top)	Perforated Casing (Bottom)	Static Water Level	Pump Rate
220	80	220	15	7	

[-] Application/Permit History

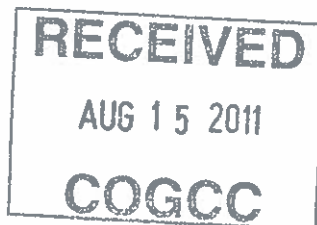
Well Construction Report Received	11/08/1973
Permit Issued	08/23/1973
Application Received	07/26/1973
Well Constructed	07/26/1973
First Beneficial Use	07/16/1973

[-] Imaged Documents

Document Name	Date Imaged	Annotated
Original File	12/04/2007	No

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MUD PROGRAM

Lease and Well No.

Gnat Hill 1-29

Location Call:

SHL: Lat 40.445739 / Long 107.392506 (NAD83)

BHL: Lat 40.436386 / Long 107.400125 (NAD83)

Section 29 Township 6N Range 89W Routt County, Colorado

Depth (TVD)	Type	Weight	Remarks
0-1000'	FW/Bentonite	8.3-9.5	Spud mud
1,000-5,440'	FW/Air/Foam	4.0-7.0	Air/Mist system with aerated water contingency
5,440'-8,590'	OBM + N2	4.0-7.0	OBM aerated with N2