Initial Application Part I

Received: 04/22/2022

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete

GMMQJ-220422-C-1080

Revised March 23, 2017

RECEIVED: 04/22/2022	REVIEWER:	TYPE: SWD	APP NO: pJZT2213249975

ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION

- Geological & Engineering Bureau –
1220 South St. Francis Drive, Santa Fe, NM 87505

ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: Hilcorp Energy Company **OGRID Number:** 372171
Well Name: Canyon Largo Unit 501 **API:** 30-039-30811
Pool: Basin Dakota **Pool Code:** 71599

SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED BELOW

1) **TYPE OF APPLICATION:** Check those which apply for [A]
A. Location – Spacing Unit – Simultaneous Dedication
☐ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD SWD-2481

B. Check one only for [I] or [II]
[I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
[II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

FOR OCD ONLY
☐ Notice Complete
☐ Application Content Complete

2) **NOTIFICATION REQUIRED TO:** Check those which apply.
A. ☒ Offset operators or lease holders
B. ☒ Royalty, overriding royalty owners, revenue owners
C. ☒ Application requires published notice
D. ☐ Notification and/or concurrent approval by SLO
E. ☒ Notification and/or concurrent approval by BLM
F. ☐ Surface owner
G. ☒ For all of the above, proof of notification or publication is attached, and/or,
H. ☐ No notice required

3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Kandis Roland
Print or Type Name

Kandis Roland
Signature

4/22/2022
Date

713-757-5246
Phone Number

kroland@hilcorp.com
e-mail Address

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance _____X___Disposal _____Storage
Application qualifies for administrative approval? _____X_____Yes _____No

II. OPERATOR: _____Hilcorp Energy Company_____

ADDRESS: _____382 Rd 3100, Aztec NM 87410_____

CONTACT PARTY: ___Jake Perry or Kandis Roland_____PHONE: ___346-237-2053/713-757-5246_____

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection. Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____Yes _____X___No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

IX. Describe the proposed stimulation program, if any.

*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: _____Kandis Roland_____TITLE: __Operations Regulatory Tech_____

SIGNATURE: _____Kandis Roland_____DATE: ___2/17/2022_____

E-MAIL ADDRESS: _____kroland@hilcorp.com_____

* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

(2) The injection interval and whether it is perforated or open-hole.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

(4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

(5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

(1) The name, address, phone number, and contact party for the applicant;

(2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;

(3) The formation name and depth with expected maximum injection rates and pressures; and,

(4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Hilcorp Energy Company

WELL NAME & NUMBER: Canyon Largo Unit 501

WELL LOCATION: 1130' FNL & 1431' FWL | C | 28 | 25N | 7W

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC – See attached

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 12 1/4" Casing Size: 8 5/8"

Cemented with: 240 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circ to surface

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft^3

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: 7 7/8" Casing Size: 4 1/2"

Cemented with: 1350 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: CBL

Total Depth: 7045'

Injection Interval

6663' feet to 6716' Perforated

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Tubing Size: _____2 3/8"_____Lining Material: ____Internally plastic coated to packer at 6613'_

Type of Packer: _____4 1/2" AS1-X Double Grip Casing Packer with on/off tool_____

Packer Setting Depth: ____6613'_____

Other Type of Tubing/Casing Seal (if applicable): _____

Additional Data

1. Is this a new well drilled for injection? _____No_____

   If no, for what purpose was the well originally drilled? ____Gas/Oil producer in Dakota Formation_

   _____

2. Name of the Injection Formation: _____Basin Dakota_____

3. Name of Field or Pool (if applicable): ___Basin Dakota_____

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. _Has not been perforated in any other zones_____

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: ___Pictured Cliffs – 2282'. There is no known deeper production interval_

   _____

   _____

   _____

III. Well Data

A. Tabular Information

1. Name: Canyon Largo Unit 501
   API: 30-039-30811
   ULSTR: C-28-25N-07W
   Footages: 1130 FNL & 1431 FWL

2. Surface Casing: 8-5/8" 24#, J-55, ST&C, land @355' KB
   Cemented with 240 sx class G, circulated 14 bbl. to surface
   12-1/4" hole to 365'

   Production Casing: 4-1/2" 11.6#, N-80, LT&C, land at 7037' KB
   Cemented with 820 sx 12.3 PPG, tail with 530 sx Pox Standard 50/50 13 ppg, circ 85 bbl. to surface, CBL 09/13/2012 shows good cement bond from PBTD to 150'
   7-7/8" hole to 7045'

3. Injection Tubing: 2-3/8", EUE, 4.7#, J-55, internally plastic coated to packer at 6613'

4. Packer: 4-1/2" AS1-X Double-Grip Casing Packer with on/off tool, set at 6613', 50' above top perforation

B. Additional Information

1. Injection Pool: Dakota, [71599] Basin Dakota

2. Injection Interval: 6663'-6716', perforated 2 shots per foot, 52 – 0.41" holes

3. Original Purpose: The well, Canyon Largo Unit 501 was originally drilled as a gas/oil producer in the Dakota Formation.

4. Other Intervals: There are no other perforated intervals

5. Oil/Gas Zones: Pictured Cliffs – 2282', there is no known, deeper productive interval

IV. Proof of Notice

The Canyon Largo Unit 501 is on federal surface and a Notice of Intent (NOI) was filed with the Bureau of Land Management. Hilcorp is the only leasehold operator within one-half mile of the well location. Proof of publication is attached.

DISTRICT I
P.O. Box 1980, Hobbs, N.M. 88241-1980

DISTRICT II
1301 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
1220 South St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87504-2088

RECEIVED
SEP 25 2009
Bureau of Land Management
Farmington Field Office

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30039-30811	71599	Basin Dakota

[4] Property Code	[5] Property Name	[6] Well Number
32660	CANYON LARGO UNIT	501

[7] OGRID No.	[8] Operator Name	[9] Elevation
208706	HUNTINGTON ENERGY, LLC	6556'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	28	25-N	7-W		1130	NORTH	1431	WEST	RIO ARRIBA

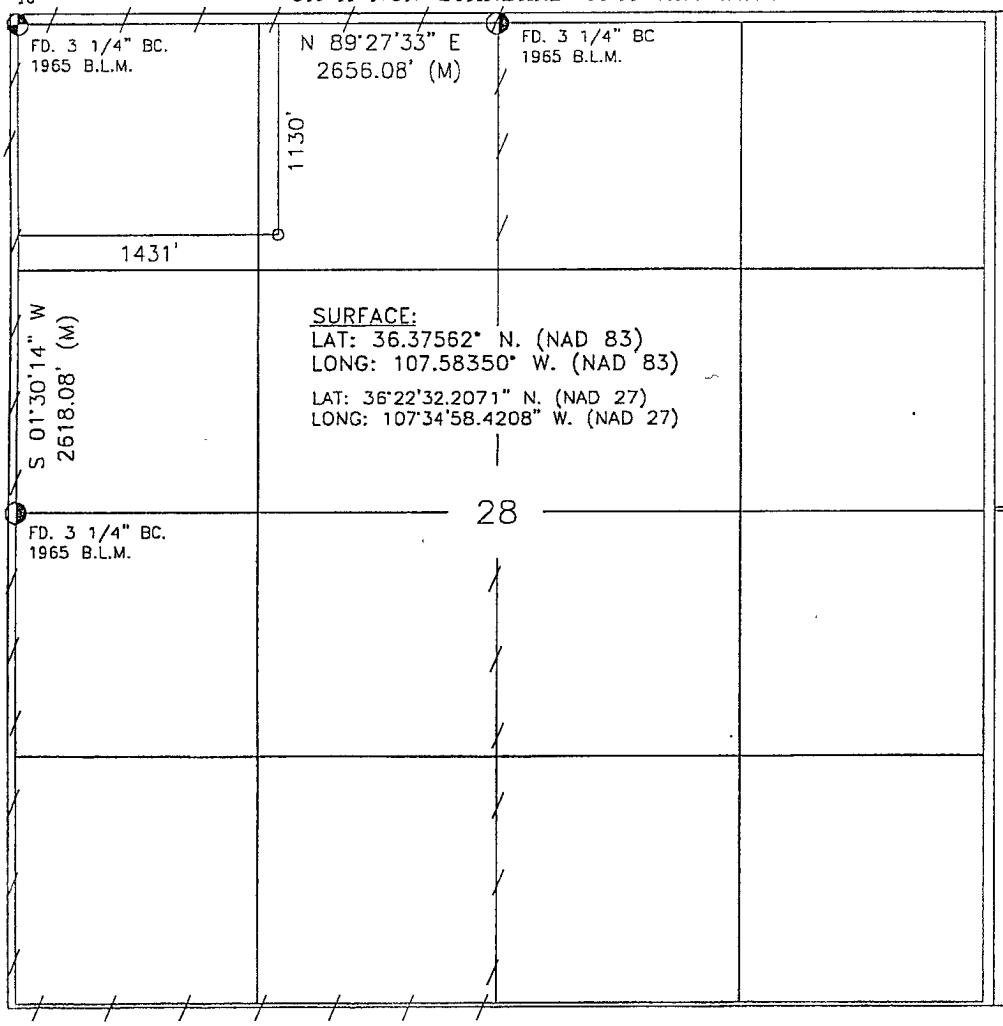
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
W-320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16



17

OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Catherine Smith 8/12/09
Signature Date

Catherine Smith
Printed Name

18

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

JUNE 15, 2009
Date of Survey

Signature and Seal of Professional Surveyor:

ROY A. RUSH
NEW MEXICO
8894
REGISTERED PROFESSIONAL LAND SURVEYOR
06-25-09

8894
Certificate Number

Hilcorp Energy Company

Schematic - Current

Well Name: CANYON LARGO UNIT #501

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003930811	C-28-25N-07W			NEW MEXICO	Vertical

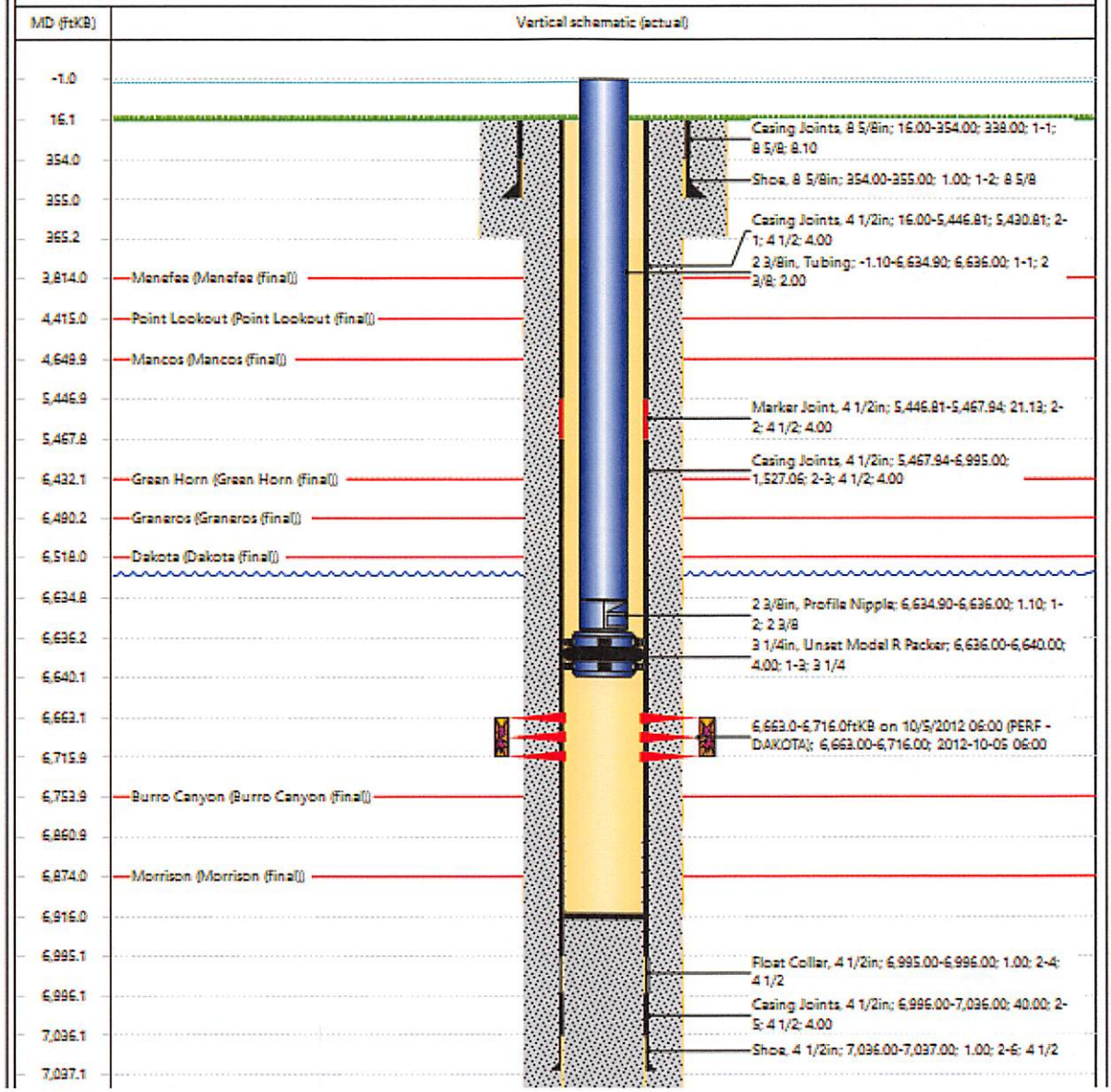
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,572.00	16.00	8/15/2012 19:45		Original Hole - 6,916.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
	OTHER		7/21/2015	7/22/2015

TD: 7,045.0

Original Hole [Vertical]



Hilcorp Energy Company

Schematic - Proposed

Well Name: CANYON LARGO UNIT #501

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003930811	C-28-25N-07W			NEW MEXICO	Vertical

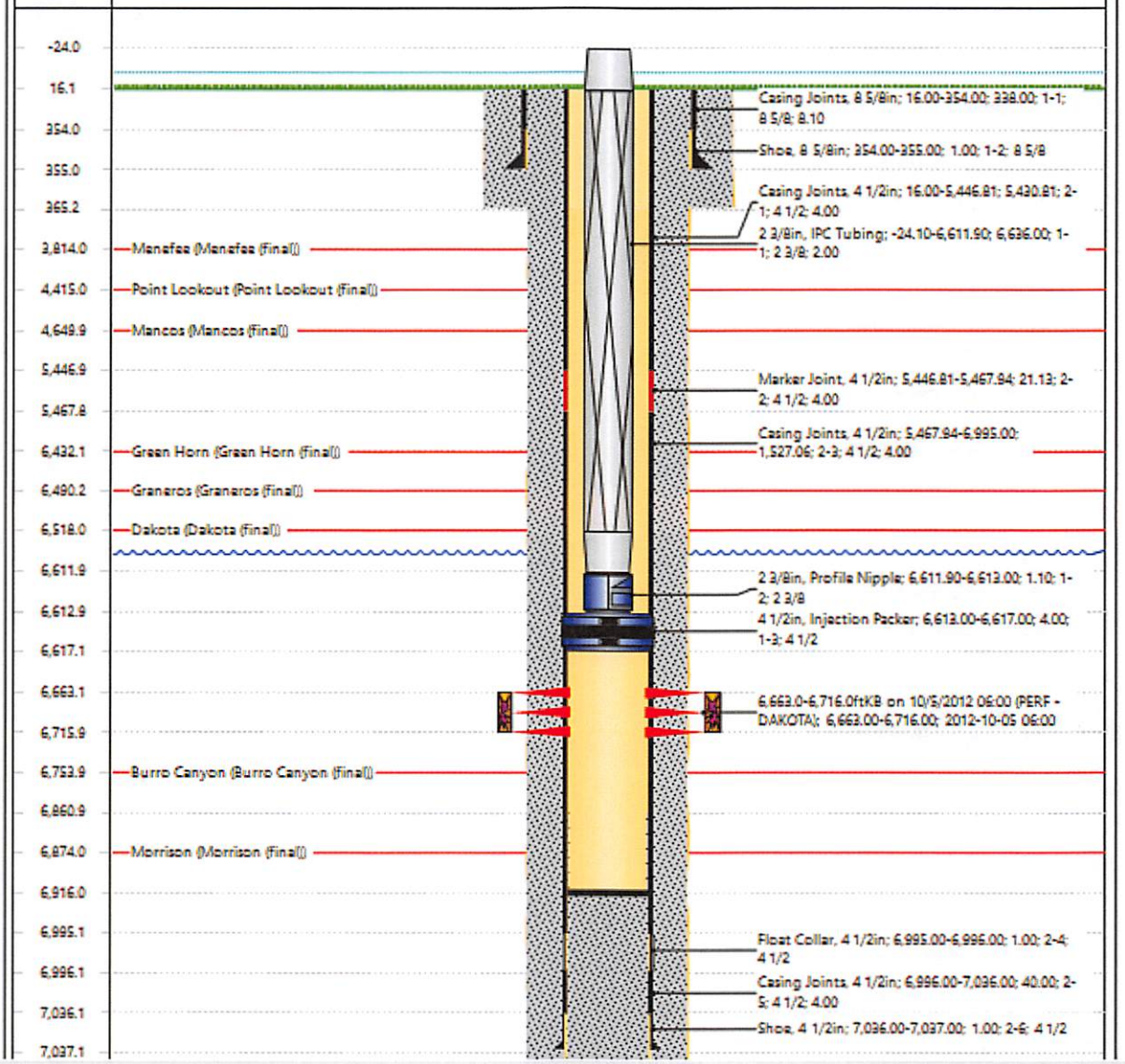
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
6,572.00	16.00	8/15/2012 19:45		Original Hole - 6,916.0	

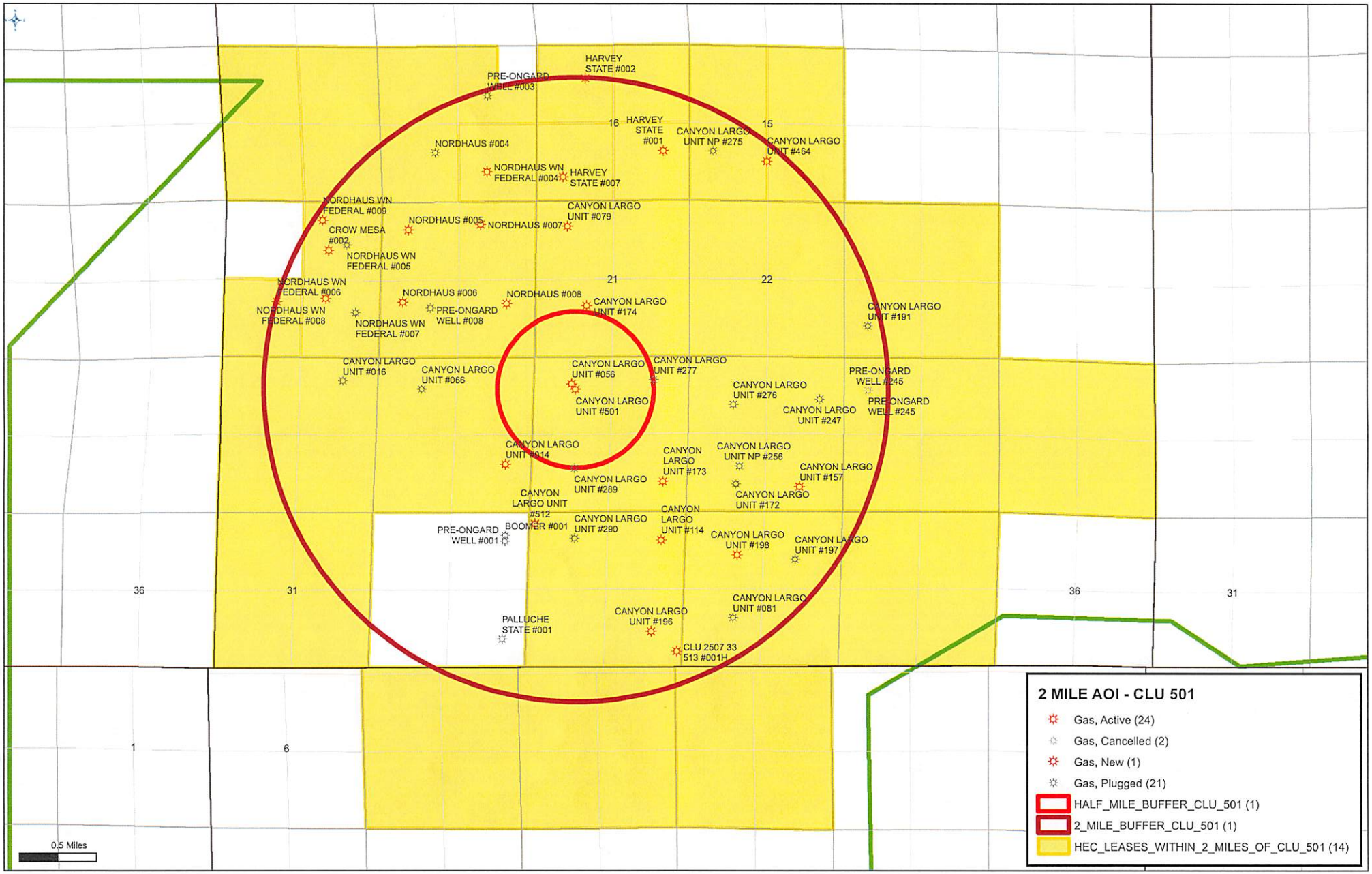
Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
	OTHER		7/21/2016	7/22/2016

TD: 7,045.0

Original Hole [Vertical]




HARVEY STATE #002
PRE-ONGARD WELL #003
16
HARVEY STATE #001
CANYON LARGO UNIT NP #275
15
CANYON LARGO UNIT #464
NORDHAUS #004
NORDHAUS WN FEDERAL #004
HARVEY STATE #007
NORDHAUS WN FEDERAL #009
CANYON LARGO UNIT #079
NORDHAUS #005
NORDHAUS #007
CROW MESA #002
NORDHAUS WN FEDERAL #005
21
22
NORDHAUS WN FEDERAL #006
NORDHAUS #006
NORDHAUS #008
CANYON LARGO UNIT #174
CANYON LARGO UNIT #191
NORDHAUS WN FEDERAL #008
PRE-ONGARD WELL #008
NORDHAUS WN FEDERAL #007
CANYON LARGO UNIT #016
CANYON LARGO UNIT #066
CANYON LARGO UNIT #056
CANYON LARGO UNIT #277
PRE-ONGARD WELL #245
CANYON LARGO UNIT #276
CANYON LARGO UNIT #501
CANYON LARGO UNIT #247
PRE-ONGARD WELL #245
CANYON LARGO UNIT #014
CANYON LARGO UNIT #173
CANYON LARGO UNIT NP #256
CANYON LARGO UNIT #157
CANYON LARGO UNIT #289
CANYON LARGO UNIT #172
CANYON LARGO UNIT #512
BOOMER #001
CANYON LARGO UNIT #290
CANYON LARGO UNIT #114
PRE-ONGARD WELL #001
CANYON LARGO UNIT #198
CANYON LARGO UNIT #197
36
31
36
31
CANYON LARGO UNIT #081
CANYON LARGO UNIT #196
PALLUCHE STATE #001
CLU 2507 33 513 #001H
1
6
0.5 Miles
2 MILE AOI - CLU 501
Gas, Active (24)
Gas, Cancelled (2)
Gas, New (1)
Gas, Plugged (21)
HALF_MILE_BUFFER_CLU_501 (1)
2_MILE_BUFFER_CLU_501 (1)
HEC_LEASES_WITHIN_2_MILES_OF_CLU_501 (14)

Wells located within 1/2 mile radius of proposed SWD Well (Canyon Largo Unit 501)

Count	UWI (API)	name	type	status	ogrid	county	ulstr	Footage	spud_date	plug_date	Dakota Penetration	Measured Depth	True Vertical Depth
1	30-039-30811	CANYON LARGO UNIT #501	Gas	Active	372171	Rio Arriba	C-28-25N-07W	1130 FNL 1431 FWL	8/15/2012		Yes, Proposed Well	7045	6916
2	30-039-05867	CANYON LARGO UNIT #056	Gas	Active	372171	Rio Arriba	D-28-25N-07W	0940 FNL 1290 FWL	4/27/1956		No	2378	2378
3	30-039-20948	CANYON LARGO UNIT #277	Gas	Plugged (site released)	14538	Rio Arriba	A-28-25N-07W	0820 FNL 1190 FEL	3/22/1976	12/5/1995	No	2639	2639
4	30-039-21174	CANYON LARGO UNIT #289	Gas	Plugged (site released)	14538	Rio Arriba	K-28-25N-07W	1460 FSL 1460 FWL	4/7/1976	12/18/2001	No	2335	2335

Wells located within 2 mile radius of proposed SWD Well (Canyon Largo Unit 501)

Count	UWI (API)	name	type	status	ogrid	county	ulstr	Footage	spud_date	plug_date	Dakota Penetration	Measured Depth	True Vertical Depth
1	30-039-20537	CANYON LARGO UNIT #174	Gas	Active	372171	Rio Arriba	K-21-25N-07W	1700 FSL 1750 FWL	11/19/1972		No	2342	2342
2	30-039-60049	CANYON LARGO UNIT #014	Gas	Active	372171	Rio Arriba	I-29-25N-07W	1600 FSL 0857 FEL	6/15/1958		No	2315	2315
3	30-039-20893	CANYON LARGO UNIT #173	Gas	Active	372171	Rio Arriba	P-28-25N-07W	0990 FSL 0800 FEL	8/2/1974		No	2689	2689
4	30-039-60050	CANYON LARGO UNIT #066	Gas	Plugged (site released)	14538	Rio Arriba	C-29-25N-07W	1090 FNL 1500 FWL	3/10/1959	12/12/2001	No	2272	2272
5	30-039-20197	NORDHAUS #008	Gas	Active	6515	Rio Arriba	I-20-25N-07W	1790 FSL 0940 FEL	4/14/1969		No	2300	2300
6	30-039-20195	NORDHAUS #006	Gas	Active	6515	Rio Arriba	L-20-25N-07W	1850 FSL 0790 FWL	4/12/1969		No	2300	2300
7	30-039-08070	PRE-ONGARD WELL #008	Gas	Plugged (site released)	214263	Rio Arriba	K-20-25N-07W	1660 FSL 1720 FWL	2/26/1966	3/8/1966	No	2250	2250
8	30-039-20194	NORDHAUS #005	Gas	Active	6515	Rio Arriba	D-20-25N-07W	0790 FNL 0790 FWL	4/18/1969		No	2325	2325
9	30-039-20196	NORDHAUS #007	Gas	Active	6515	Rio Arriba	B-20-25N-07W	0790 FNL 1850 FEL	4/13/1969		No	2300	2300
10	30-039-05960	CANYON LARGO UNIT #079	Gas	Active	372171	Rio Arriba	D-21-25N-07W	0872 FNL 1068 FWL	3/12/1959		No	2344	2344
11	30-039-20930	CANYON LARGO UNIT #276	Gas	Plugged (site released)	14538	Rio Arriba	F-27-25N-07W	1655 FNL 1515 FWL	8/3/1974	11/29/1995	No	2623	2623
12	30-039-20907	CANYON LARGO UNIT NP #256	Gas	Plugged (site released)	14538	Rio Arriba	K-27-25N-07W	1520 FSL 1760 FWL	3/15/1975	6/7/2012	Yes, Plugged	7190	7190
13	30-039-20403	CANYON LARGO UNIT #172	Gas	Plugged (site released)	14538	Rio Arriba	N-27-25N-07W	0910 FSL 1665 FWL	8/4/1971	11/29/1995	No	2757	2757
14	30-039-20281	CANYON LARGO UNIT #157	Gas	Active	372171	Rio Arriba	O-27-25N-07W	0810 FSL 1460 FEL	10/7/1969		No	2796	2796
15	30-039-20896	CANYON LARGO UNIT #247	Gas	Plugged (site released)	14538	Rio Arriba	H-27-25N-07W	1450 FNL 0820 FEL	3/25/1976	3/21/2002	No	2730	2730
16	30-039-20947	CANYON LARGO UNIT NP #275	Gas	Plugged (site released)	14538	Rio Arriba	L-15-25N-07W	1650 FSL 0790 FWL	3/26/1976	3/10/1999	No	2707	2707
17	30-039-20704	CANYON LARGO UNIT #197	Gas	Plugged (site released)	14538	Rio Arriba	G-34-25N-07W	1620 FNL 1560 FEL	8/6/1973	9/16/1997	No	2705	2705
18	30-039-22608	CANYON LARGO UNIT #191	Gas	Plugged (site released)	14538	Rio Arriba	M-23-25N-07W	1050 FSL 0800 FWL	5/27/1981	10/28/1993	No	2671	2681
19	30-039-20895	PRE-ONGARD WELL #245	Gas	Cancelled	214263	Rio Arriba	D-26-25N-07W	1140 FNL 0815 FWL			No		
20	30-039-22609	PRE-ONGARD WELL #245	Gas	Cancelled	214263	Rio Arriba	D-26-25N-07W	1140 FNL 0815 FWL			No		
21	30-039-23347	CROW MESA #002	Gas	Active	9338	Rio Arriba	G-19-25N-07W	1660 FNL 1770 FEL	12/16/1983		Yes, Active	6905	6905
22	30-039-05896	NORDHAUS WN FEDERAL #006	Gas	Active	9338	Rio Arriba	K-19-25N-07W	1825 FSL 1850 FWL	12/13/1956		No	2252	2252
23	30-039-27591	NORDHAUS WN FEDERAL #009	Gas	Active	9338	Rio Arriba	B-19-25N-07W	0660 FNL 1995 FEL	4/13/2004		No	2320	2320
24	30-039-05948	NORDHAUS WN FEDERAL #005	Gas	Plugged (site released)	9338	Rio Arriba	H-19-25N-07W	1463 FNL 1166 FEL	12/12/1956	6/28/2005	No	2267	2267
25	30-039-27590	NORDHAUS WN FEDERAL #008	Gas	Active	9338	Rio Arriba	J-19-25N-07W	1955 FSL 1835 FEL	4/21/2004		No	2357	2357
26	30-039-08069	NORDHAUS WN FEDERAL #007	Gas	Plugged (site released)	147179	Rio Arriba	I-19-25N-07W	1500 FSL 0800 FEL	2/18/1960	5/24/2003	No	2350	2350
27	30-039-60052	CANYON LARGO UNIT #016	Gas	Plugged (site released)	14538	Rio Arriba	A-30-25N-07W	0810 FNL 1180 FEL	6/5/1958	8/15/2011	No	2613	2613
28	30-039-20193	NORDHAUS #004	Gas	Plugged (site released)	6515	Rio Arriba	K-17-25N-07W	1650 FSL 1850 FWL	4/17/1969	9/21/2007	No	2310	2310
29	30-039-06029	PRE-ONGARD WELL #003	Gas	Plugged (site released)	214263	Rio Arriba	G-17-25N-07W	1700 FNL 1650 FEL	11/30/1956	5/20/1971	No	2260	2260
30	30-039-05985	NORDHAUS WN FEDERAL #004	Gas	Active	9338	Rio Arriba	O-17-25N-07W	0990 FSL 1650 FEL	12/3/1956		No	2266	2266
31	30-039-05980	HARVEY STATE #007	Gas	Active	372171	Rio Arriba	M-16-25N-07W	0800 FSL 0915 FWL	9/12/1956		No	2340	2340
32	30-039-23001	BOOMER #001	Gas	Plugged (site released)	6515	Rio Arriba	A-32-25N-07W	0790 FNL 0790 FEL	6/3/1982	6/14/2017	No	2367	2367
33	30-039-20540	CANYON LARGO UNIT #114	Gas	Active	372171	Rio Arriba	A-33-25N-07W	0990 FNL 0800 FEL	11/6/1972		No	2691	2691
34	30-039-06038	HARVEY STATE #002	Gas	Active	330132	Rio Arriba	C-16-25N-07W	1150 FNL 1650 FWL	9/21/1955		No	2685	2685
35	30-039-21376	CANYON LARGO UNIT #290	Gas	Plugged (site released)	14538	Rio Arriba	C-33-25N-07W	0900 FNL 1550 FWL	7/19/1977	12/14/2001	No	2320	2320
36	30-039-05758	PRE-ONGARD WELL #001	Gas	Plugged (site released)	214263	Rio Arriba	A-32-25N-07W	0990 FNL 0790 FEL	7/3/1961	4/30/1965	No	2317	2317
37	30-039-31151	CLU 2507 33 513 #001H	Gas	Active	372171	Rio Arriba	P-33-25N-07W	0505 FSL 0158 FEL	8/22/2013		No	10850	6061
38	30-039-20742	CANYON LARGO UNIT #196	Gas	Active	372171	Rio Arriba	P-33-25N-07W	1180 FSL 1050 FEL	8/19/1973		No	2628	2628
39	30-039-06004	HARVEY STATE #001	Gas	Active	330132	Rio Arriba	I-16-25N-07W	1650 FSL 0890 FEL	9/21/1955		No	2690	2690
40	30-039-60053	CANYON LARGO UNIT #081	Gas	Plugged (site released)	14538	Rio Arriba	K-34-25N-07W	1650 FSL 1700 FWL	4/1/1959	5/17/2012	No	2701	2701
41	30-039-27871	CANYON LARGO UNIT #464	Gas	Active	372171	Rio Arriba	J-15-25N-07W	1330 FSL 2595 FEL	1/24/2006		Yes, Active	7404	7404
42	30-039-20585	PALLUCHE STATE #001	Gas	Plugged (site released)	6515	Rio Arriba	P-32-25N-07W	0940 FSL 0790 FEL	12/23/1972	5/4/2000	No	2380	2380
43	30-039-31177	CANYON LARGO UNIT #512	Gas	New	372171	Rio Arriba	D-33-25N-07W	0417 FNL 0211 FWL			No		
44	30-039-20703	CANYON LARGO UNIT #198	Gas	Active	372171	Rio Arriba	F-34-25N-07W	1490 FNL 1780 FWL	8/7/1973		No	2809	2809

Hilcorp Energy Company

Schematic - Current

Well Name: CANYON LARGO UNIT #56

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003905867	028-025N-007W-D	BALLARD PICTURED CLIFFS (GAS)		NEW MEXICO	

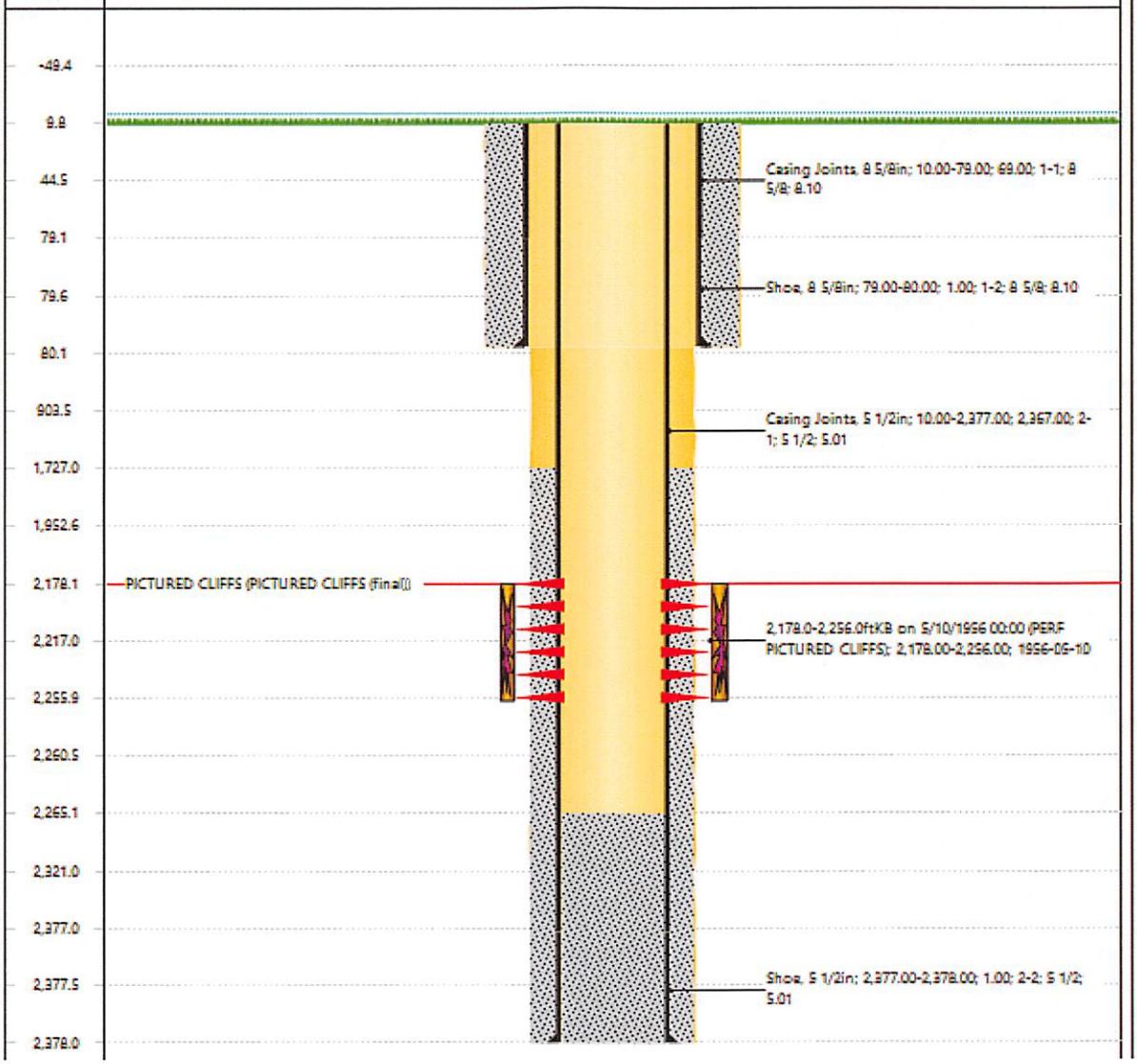
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,562.00	10.00	4/27/1956 00:00		Original Hole - 2,255.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date

TD: 2,378.0

Original Hole



Hilcorp Energy Company

Schematic - Current

Well Name: CANYON LARGO UNIT #277

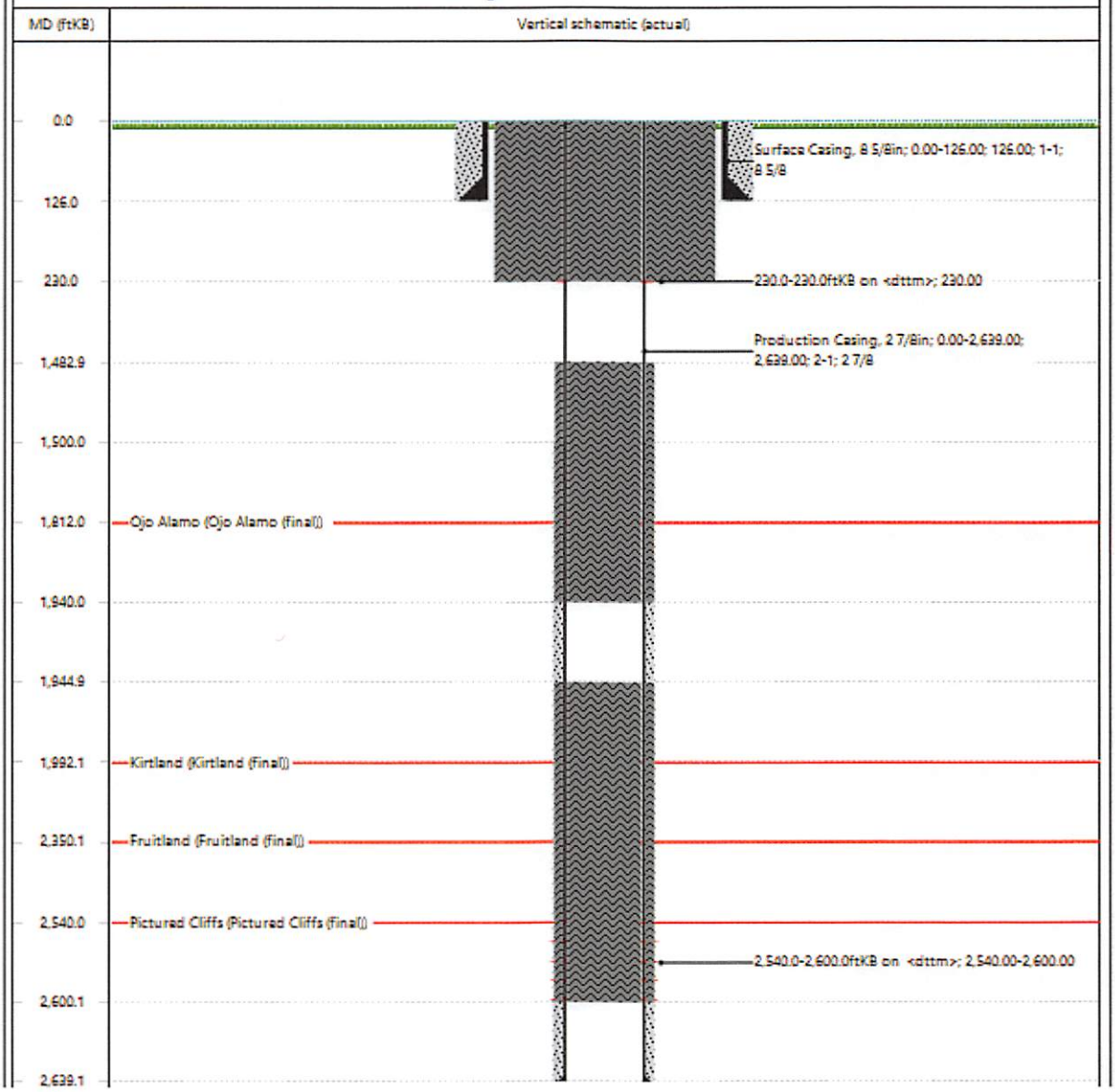
API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003920948	028-025N-007W-A	BALLARD PC (GAS #0080		NEW MEXICO	VERTICAL

Original KB/RT Elevation (ft)	KB/Ground Distance (ft)	Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
6,859.00	11.00	3/22/1976 00:00	12/5/1995 12:00	Original Hole - 2,639.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
ABANDONMENT	ABANDONMENT P&A	PLUG & ABDND	11/29/1995	12/5/1995

TD: Original Hole [VERTICAL]



Hilcorp Energy Company

Schematic - Current

Well Name: CANYON LARGO UNIT #289

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003921174	028-025N-007W-K	BALLARD PICTURED CLIFFS (GAS)		NEW MEXICO	

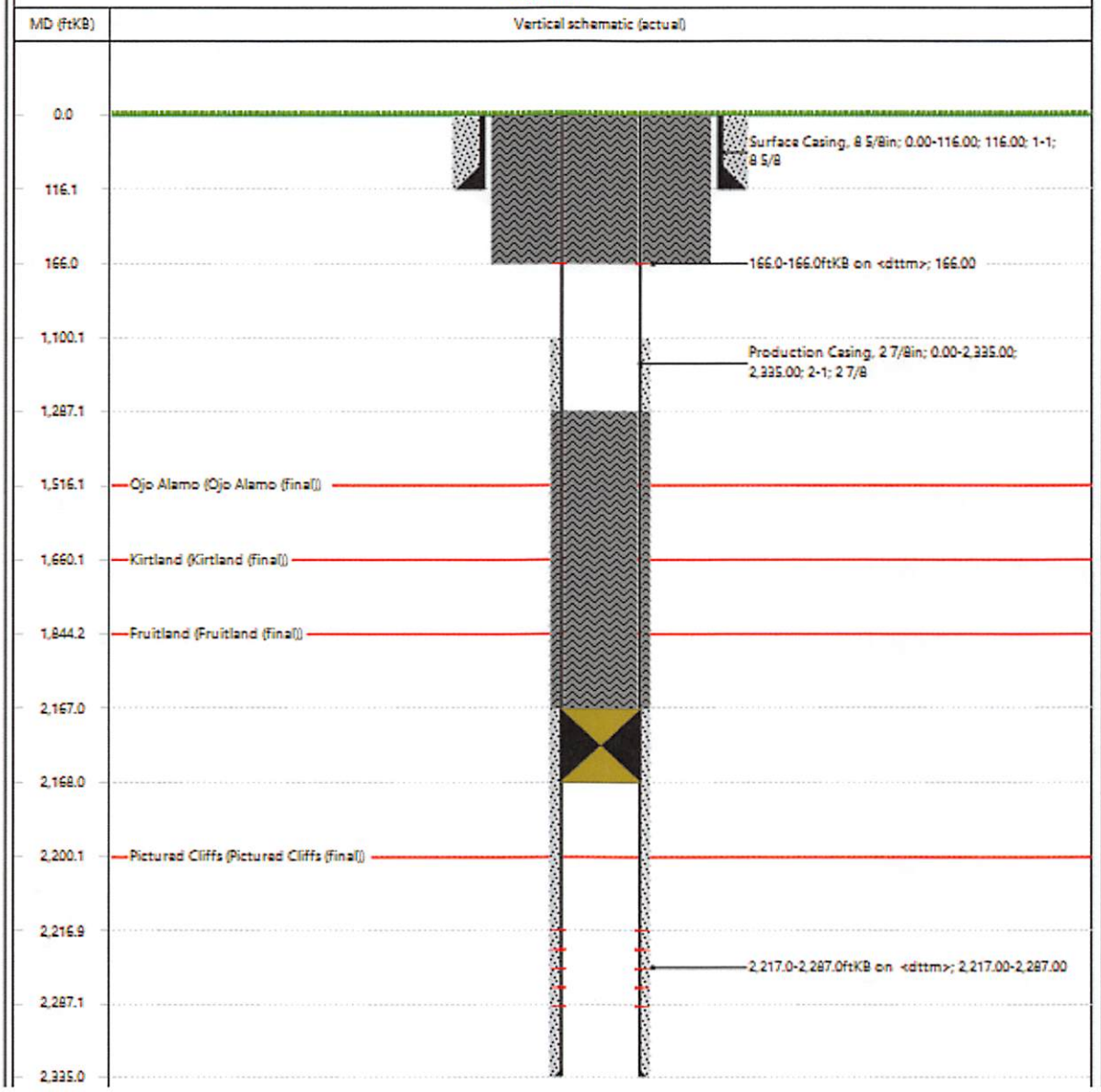
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
5,611.00	0.00	4/7/1976 00:00	12/18/2001 12:00	Original Hole - 0.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
ABANDONMENT	ABANDONMENT P&A	PLUG & ABDND	12/14/2001	12/18/2001

TD:

Original Hole



Part VII. Proposed Operation

1. The proposed injection well will be used to dispose of produced water from wellbores operated by Hilcorp San Juan. Average injection rate will be 450 BWPD with a maximum of 1000 BWPD.
2. The system will be closed.
3. The Dakota was fracture stimulated 10/09/2012 to producer hydrocarbon gas. Several attempts were made by the previous operator to flow the well, but no meaningful production was recovered from this interval due to high water saturation. Fracture treatment data from the 2012 stimulation shows a fracture gradient of 0.84 PSI/ft or 5600 PSI at 6689' which is the mid-perforation depth in the Dakota completed interval. Maximum surface injection pressure for the well shall not exceed 2000 PSI and the average injection pressure is predicted to be 1000 PSI.
4. The source of water to be disposed is from the Dakota formation. Produced water that will be disposed in this wellbore are within the immediate vicinity of 25N 7W and 26N 7W, 25N 6W, and 26N 6W. Water analyses for the Dakota formation are attached. The water from the productive Dakota to be injected is compatible with the formation Dakota water in the proposed disposal well.
5. A chemical analysis of the Dakota water from the Canyon Largo 501 is attached.

Part VIII. Geologic Data

The proposed injection interval is within the Dakota formation. The Ojo Alamo is one of the primary sources of drinking water in the region and has contact with the Canyon Largo Unit 501 at 1450'. Surface casing was set at 355'. Production casing was run past the Dakota interval and CBL dated 09/13/2012 shows good cement bond on the production string from 150' to PBTD at 6916'. The Ojo Alamo is protected from possible contamination. The vertical distance between the Ojo Alamo and Dakota formations is approximately 5000' and the Kirtland and Lewis shales also serve as thick barriers to protect against water migration to surface.

Formation Contacts within Canyon Largo Unit 501

Nacimiento	approx. < 150'
Ojo Alamo	1450'
Kirtland	1588'
Fruitland Coal	1790'
Pictured Cliffs	2192'
Lewis Shale	3040'
Mesaverde	3770'
Gallup	5634'
Dakota	6518'

The lithology of the Dakota Group is typical for what is seen within the surrounding vicinity. Dakota deposition is generally a transgressive event and reservoirs include braided and meandering fluvial, deltaic shoreface, and shelf ridge sandstones. The Dakota Group generally consists of Upper Dakota and Lower Dakota sands.

The Upper Dakota (Paguate, Two Wells, and Cubero) is comprised primarily of low porosity marginal marine and coastal plain deposits that are part of a large basin centered stratigraphic trap, with the most homogeneous and predictable reservoirs being the shoreface intervals of the marine sections. Each sand unit is a shoreface sandstone with a characteristic funnel shaped coarsening upward log profile capped by a marine flooding surface. The marine facies successions are interpreted as wave dominated and wave influenced shoreline complexes (Sturm 1999). The linear shoreface sands are deposited over large distances and are occasionally incised by perpendicular delta distributary channels.

Mud logs and gamma ray logs from nearby wells indicate fine sand grains coarsening upwards in each sand unit within this interval. Nearby mud log reports describe the Paguate, Two Wells, and Cubero each as off white to gray sandstones, slightly friable to rounded to sub-rounded. Sands become gray to brown-gray with some calcite cement, intermixed silt and shale lower in each section. Streaks of shale and limestone are noted in the Cubero section. The nearby density and neutron logs have porosities from 8-10% in the better parts of each sand, with associated drops in the neutron log readings suggesting gas content. However, lack of crossover with the density log signifies higher water saturations.

The Lower Dakota (Encinal Canyon, and Burrow Canyon) is primarily a braided fluvial system with good porosity and generally good reservoir quality. Nearby mud log reports describe the Encinal Canyon and Burro Canyon as a mix of light gray to tan sands along with frosted to clear unconsolidated sands, rounded to subangular. Traces of mica, glauconite, kaolinite clay, feldspar, chert fragments, and interbedded gray shale are also noted. The nearby density and neutron logs have porosities from 10-18% in the better parts of each sand, with associated drops in the neutron log readings suggesting gas content. However, lack of crossover with the density log signifies higher water saturations.

The general angle of strike in this area is S35E or 145 degrees, with a NE dip less than 1 degree perpendicular to the strike. There is no evidence of surface or subsurface faulting within the vicinity.

IX. Stimulation Program

This wellbore was originally drilled and completed by Huntington as a Dakota step-out. The Dakota was water and sand fracture stimulated in October of 2012. Immediately following completion, tubing was installed, and the wellbore was cleaned out to PBTD to remove excess frac sand. One week was spent swabbing the well to achieve flow but these efforts were not successful. It is not anticipated that any further stimulation will be necessary prior to commencing injection.

X. Logging and Test Data

Reservoir saturation logs were previously submitted to the Division and are dated 03/20/2013. A cement bond log was recorded 09/13/2012 and has been submitted to the Division.

XI. Fresh Water Wells

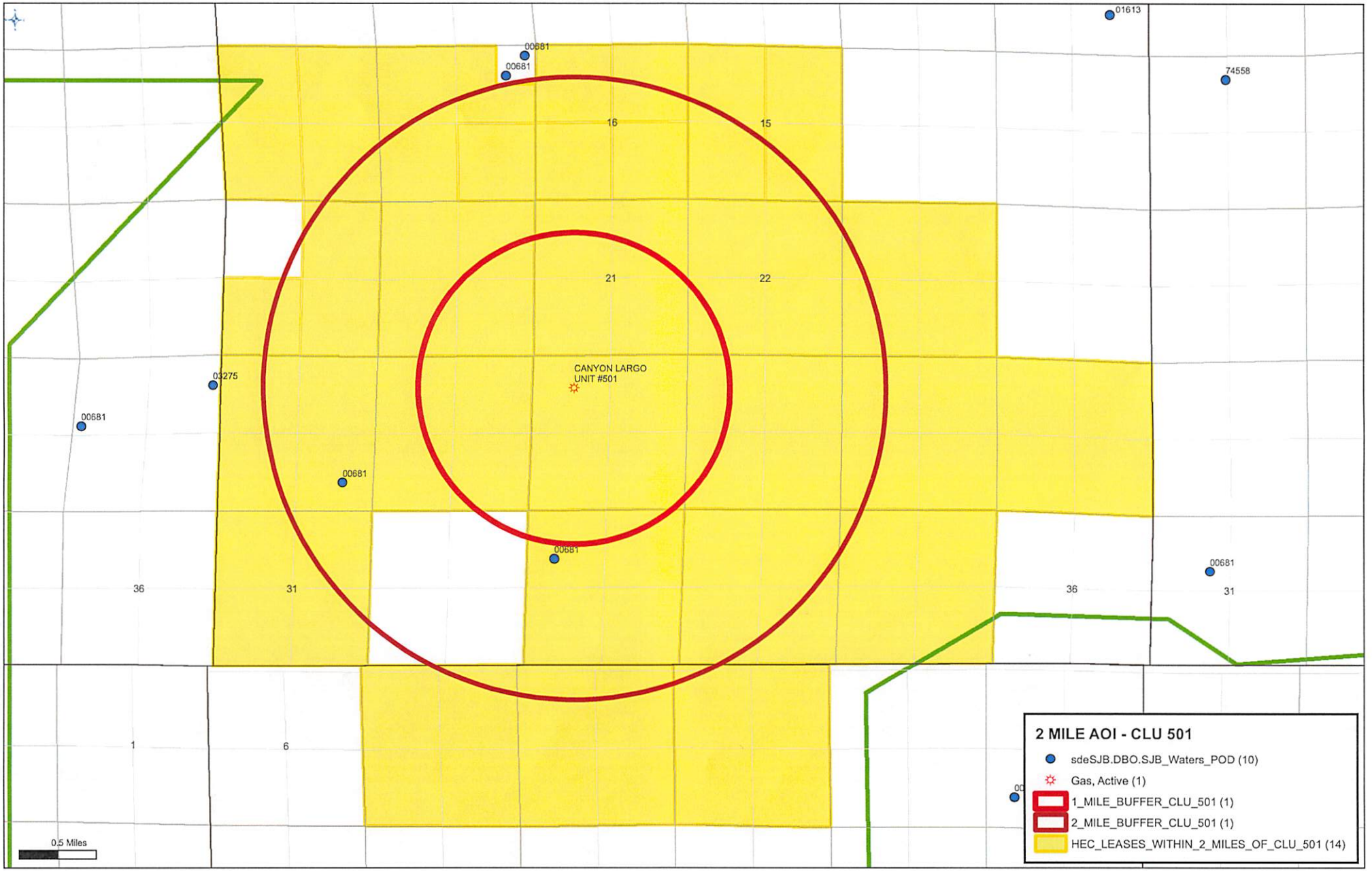
A search for fresh water wells within one mile of the proposed disposal well was conducted using the New Mexico Office of the State Engineer website at http://nmwrrs.ose.state.nm.us/nmwrrs/index.html. The search returned no fresh water wells within one mile of the proposed disposal well. A map showing the locations of the nearest wells is attached.

XII. Statement of Geologic and Engineering Data

I have examined all available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground source of drinking water.

Jake Perry, Engineer — Date: 4-22-22

Bryan Richards, Geologist — Date: 4-22-22


01613
00681
00681
74558
16
15
21
22
CANYON LARGO
UNIT #501
03275
00681
00681
00681
00681
36
31
36
31
1
6
0.5 Miles
2 MILE AOI - CLU 501
sdeSJB.DBO.SJB_Waters_POD (10)
Gas, Active (1)
1_MILE_BUFFER_CLU_501 (1)
2_MILE_BUFFER_CLU_501 (1)
HEC_LEASES_WITHIN_2_MILES_OF_CLU_501 (14)

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: South	**Reported:**
Aztec NM, 87410	Project Manager: David Bounds	02/11/22 13:56

Canyon Largo Unit #499
Area 9

2202089-03 (Produced Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	**1230**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Carbonate as CaCO3*	**40.0**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Total as CaCO3*	**1270**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Chloride*	**7880**	250	7.60	mg/L	250	02/09/22 13:44	EPA300.0		AES
Conductivity*	**27600**	1.00		umho/cm @ 25.0°C	1	02/09/22 10:30	2510 B		VJW
pH*	**7.79**			pH Units	1	02/09/22 10:30	EPA150.1	H1	VJW
pH Temperature, degrees C	**16.1**			pH Units	1	02/09/22 10:30	EPA150.1	H1	VJW
Resistivity	**36.3**			ohm/cm	1	02/09/22 10:30	2510 B		VJW
Total Dissolved Solids*	**18400**	80.0		mg/L	8	02/09/22 16:00	EPA160.1		VJW
Specific Gravity	**1.015**	0.8000		No Unit	1	02/09/22 10:10	ASTM D1429-03		VJW
Sulfate*	**2640**	250	31.0	mg/L	250	02/09/22 13:44	EPA300.0		AES
Potentially Dissolved Metals by ICP									
Barium*	<0.500	0.500	0.212	mg/L	25	02/11/22 11:18	EPA200.7		AES
Calcium*	**540**	2.50	0.590	mg/L	25	02/11/22 11:17	EPA200.7		AES
Hardness, as CaCO3	**1560**	16.5	4.64	mg/L	25	02/11/22 11:17	2340 B		AES
Iron*	**4.68**	1.25	0.889	mg/L	25	02/11/22 11:17	EPA200.7		AES
Lead*	<2.50	2.50	0.480	mg/L	25	02/11/22 11:18	EPA200.7		AES
Magnesium*	**51.5**	2.50	0.769	mg/L	25	02/11/22 11:17	EPA200.7		AES
Manganese*	**0.692**	0.500	0.187	mg/L	25	02/11/22 11:17	EPA200.7		AES
Potassium*	**122**	25.0	1.63	mg/L	25	02/11/22 11:17	EPA200.7		AES
Silica (SIO2)	**83.4**	26.7	1.71	mg/L	25	02/11/22 11:17	Calculation		AES
Silicon	**39.0**	12.5	0.798	mg/L	25	02/11/22 11:17	EPA200.7		AES
Sodium*	**8600**	25.0	2.64	mg/L	25	02/11/22 11:17	EPA200.7		AES
Strontium*	**21.1**	2.50	0.106	mg/L	25	02/11/22 11:17	EPA200.7		AES
Zinc*	<2.50	2.50	0.184	mg/L	25	02/11/22 11:18	EPA200.7		AES
Cation/Anion Balance	**15.59**								

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: South	**Reported:**
Aztec NM, 87410	Project Manager: David Bounds	02/11/22 13:56

Canyon Largo Unit #501
Area 9

2202089-02 (Produced Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	**970**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Carbonate as CaCO3*	<10.0	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Total as CaCO3*	**970**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Chloride*	**13100**	500	15.2	mg/L	500	02/09/22 13:23	EPA300.0		AES
Conductivity*	**40600**	1.00		umho/cm @ 25.0°C	1	02/09/22 10:30	2510 B		VJW
pH*	**7.47**			pH Units	1	02/09/22 10:30	EPA150.1	H1	VJW
pH Temperature, degrees C	**15.9**			pH Units	1	02/09/22 10:30	EPA150.1	H1	VJW
Resistivity	**24.6**			ohm/cm	1	02/09/22 10:30	2510 B		VJW
Total Dissolved Solids*	**27100**	80.0		mg/L	8	02/09/22 16:00	EPA160.1		VJW
Specific Gravity	**1.020**	0.8000		No Unit	1	02/09/22 10:10	ASTM D1429-03		VJW
Sulfate*	**2200**	500	62.0	mg/L	500	02/09/22 13:23	EPA300.0		AES
Potentially Dissolved Metals by ICP									
Barium*	<0.800	0.800	0.339	mg/L	40	02/11/22 11:16	EPA200.7		AES
Calcium*	**123**	4.00	0.944	mg/L	40	02/11/22 11:15	EPA200.7		AES
Hardness, as CaCO3	**365**	26.5	7.42	mg/L	40	02/11/22 11:15	2340 B		AES
Iron*	<2.00	2.00	1.42	mg/L	40	02/11/22 11:15	EPA200.7		AES
Lead*	<4.00	4.00	0.768	mg/L	40	02/11/22 11:16	EPA200.7		AES
Magnesium*	**14.0**	4.00	1.23	mg/L	40	02/11/22 11:15	EPA200.7		AES
Manganese*	<0.299	0.800	0.299	mg/L	40	02/11/22 11:15	EPA200.7		AES
Potassium*	**62.7**	40.0	2.60	mg/L	40	02/11/22 11:15	EPA200.7		AES
Silica (SIO2)	**36.8**	42.8	2.73	mg/L	40	02/11/22 11:15	Calculation		AES
Silicon	<20.0	20.0	1.28	mg/L	40	02/11/22 11:15	EPA200.7		AES
Sodium*	**6100**	40.0	4.23	mg/L	40	02/11/22 11:15	EPA200.7		AES
Strontium*	**7.12**	4.00	0.169	mg/L	40	02/11/22 11:15	EPA200.7		AES
Zinc*	<4.00	4.00	0.294	mg/L	40	02/11/22 11:16	EPA200.7		AES
Cation/Anion Balance	**-22.22**								

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: South	**Reported:**
Aztec NM, 87410	Project Manager: David Bounds	02/11/22 13:56

Canyon Largo Unit #431E
Area 9

2202089-01 (Produced Water)

Analyte	Result	RL	MDL	Units	Dilution	Analyzed	Method	Notes	Analyst
General Chemistry									
Alkalinity, Bicarbonate as CaCO3*	**1260**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Carbonate as CaCO3*	**40.0**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Hydroxide as CaCO3*	<10.0	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Alkalinity, Total as CaCO3*	**1300**	10.0	2.27	mg/L	10	02/10/22 08:30	2320 B		VJW
Chloride*	**6400**	250	7.60	mg/L	250	02/09/22 13:03	EPA300.0		AES
Conductivity*	**22400**	1.00		umho/cm @ 25.0°C	1	02/09/22 10:30	2510 B		VJW
pH*	**8.10**			pH Units	1	02/09/22 10:30	EPA150.1	H1	VJW
pH Temperature, degrees C	**17.7**			pH Units	1	02/09/22 10:30	EPA150.1	H1	VJW
Resistivity	**44.6**			ohm/cm	1	02/09/22 10:30	2510 B		VJW
Total Dissolved Solids*	**14200**	80.0		mg/L	8	02/09/22 16:00	EPA160.1		VJW
Specific Gravity	Estimated 1.013	0.8000		No Unit	1	02/09/22 10:10	ASTM D1429-03		VJW
Sulfate*	**1320**	250	31.0	mg/L	250	02/09/22 13:03	EPA300.0		AES
Potentially Dissolved Metals by ICP									
Barium*	<0.500	0.500	0.212	mg/L	25	02/11/22 11:13	EPA200.7		AES
Calcium*	**32.0**	2.50	0.590	mg/L	25	02/11/22 11:13	EPA200.7		AES
Hardness, as CaCO3	**108**	16.5	4.64	mg/L	25	02/11/22 11:13	2340 B		AES
Iron*	<1.25	1.25	0.889	mg/L	25	02/11/22 11:13	EPA200.7		AES
Lead*	<2.50	2.50	0.480	mg/L	25	02/11/22 11:13	EPA200.7		AES
Magnesium*	**6.95**	2.50	0.769	mg/L	25	02/11/22 11:13	EPA200.7		AES
Manganese*	<0.187	0.500	0.187	mg/L	25	02/11/22 11:13	EPA200.7		AES
Potassium*	**58.7**	25.0	1.63	mg/L	25	02/11/22 11:13	EPA200.7		AES
Silica (SIO2)	**32.6**	26.7	1.71	mg/L	25	02/11/22 11:13	Calculation		AES
Silicon	**15.3**	12.5	0.798	mg/L	25	02/11/22 11:13	EPA200.7		AES
Sodium*	**4770**	25.0	2.64	mg/L	25	02/11/22 11:13	EPA200.7		AES
Strontium*	**7.87**	2.50	0.106	mg/L	25	02/11/22 11:13	EPA200.7		AES
Zinc*	<2.50	2.50	0.184	mg/L	25	02/11/22 11:13	EPA200.7		AES
Cation/Anion Balance	**-4.23**								

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Green Analytical Laboratories
dzufelt@greenanalytical.com p: 970.247.4220 f: 970.247.4227 75 Suttle Street Durango, CO 81303
www.GreenAnalytical.com

Hilcorp	Project: API - Oil Field "Complete Water"	
382 Road 3100	Project Name / Number: South	**Reported:**
Aztec NM, 87410	Project Manager: David Bounds	02/11/22 13:56

There was insufficient volume to analyze Specific Gravity on 2202-089-01; value is estimated..

Green Analytical Laboratories

Debbie Zufelt

Debbie Zufelt, Reports Manager

Proof of Notice:

Publication posted in the Rio Grande Sun 3/24/22 – 3/20/22.

Copy of Publication

LEGAL NOTICE

Intent to Dispose of Water in the Subsurface

Hilcorp Energy Company proposes to inject produced water into the Basin Dakota formation in the Canyon Largo Unit 501 well (API 30039308110000), located 1,130' FNL and 1,431' FWL of Section 28-T25N-R07W, NMPM, Rio Arriba County, New Mexico. The new depth of injection will be from 6,663' – 6,716'. Maximum anticipated rate is 1,000 BWPD at a maximum surface injection pressure of 2,000 psig.

Questions should be addressed to Hilcorp Energy Company, Attn: Keri Hutchins at 382 Road 3100, Aztec, NM 87410 or call (505)564-0743. Objections to the proposal or request for hearing by interested parties must be filed with the New Mexico Oil Conservation Division, 1220 S. St. Francis Drive, Santa Fe, NM 87505 within 15 days.

Legal No. _____ published in the Rio Grande Sun on March ___, 2022.

(Published March 24th, 2022)

Advertising Quote

Rio Grande Sun

PO Box 790
Espanola, NM 87532

Phone: 505-753-2126
Fax: 505-753-2140

KERI HUTCHINS
HILCORP SAN JUAN
382 ROAD 3100
AZTEC, NM 87410

Acct #: 00006953
Phone: (505)564-0743
Date: 03/16/2022
Ad #: 00029477
Salesperson: Ad Taker: CV

Class: 899
Ad Notes:

Sort Line: LEGAL NOTICE Intent to Dispose

Description	Start	Stop	Ins.	Cost/Day	Amount
affd Affidavit					5.00
01 RIO GRANDE SUN	03/24/2022	03/24/2022	1	32.00	32.00
05 Rio Grande Sun Online	03/24/2022	03/24/2022	1	0.00	0.00

Ad Text:

LEGAL NOTICE
Intent to Dispose of Water in the Subsurface
Hilcorp Energy Company proposes to inject produced water into the Basin Dakota formation in the Canyon Largo Unit 501 well (API 30039308110000), located 1,130' FNL and 1,431' FWL of Section 28-T25N-R07W, NMPM, Rio Arriba County, New Mexico. The new depth of injection will be from 6,663' – 6,716'. Maximum anticipated rate is 1,000 BWPD at a maximum surface injection pressure of 2,000 psig. Questions should be addressed to Hilcorp Energy Company, Attn: Keri Hutchins at 382 Road 3100, Aztec, NM 87410 or call

Payment Reference:

Total:	37.00
Tax:	3.31
Net:	40.31
Prepaid:	0.00
Total Due	**40.31**

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1864 43)

McHugh Co.
650 S. Cherry No. 1225
Denver, CO 80246

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1864 36)

Devon Energy Co. L.P.
333 W. Sheridan Ave.
Oklahoma City, OK 73102

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1864 29)

Great Western Drilling Company
700 W. Louisiana Ave.
Midland, TX 79701

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1864 12)

Riggs Oil and Gas Corporation
P.O. Box 711
Farmington, NM 87499

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1864 05)

Dugan Production Corporation
709 E. Murray Dr.
Farmington, NM 87401

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1863 99)

Enduring Resources IV LLC
200 Energy Ct.
Farmington, NM 87401

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Hilcorp

February 17, 2022

Via Certified Mail (Article No. 9214 8969 0099 9790 1808 1863 82)

Bureau of Land Management
Farmington Resource Area
6251 College Blvd.
Farmington, NM 87402

Re: Canyon Largo Unit No. 501
API No. 30-039-30811
San Juan County, NM

All Affected Parties:

Hilcorp Energy Company is applying (C-108 Application Enclosed) to convert its Canyon Largo Unit No. 501 well into a Salt Water Disposal Well. The subject well was initially drilled in 2012 by Huntington Energy, LLC to target the Dakota Formation but was not completed.

Pursuant to Section 19.15.26 of the New Mexico Administrative Code, this letter serves as formal notice of the SWD conversion. No action is needed unless you have any questions or objections.

- *Well Name: Canyon Largo Unit No. 501*
- *API: 30-039-30811*
- *Location: C-28, T25N-R07W*
- *Injection Interval: 6,663' to 6,716'*
- *Proposed Disposal Zone: Basin Dakota (Pool Code: 71599)*
- *Applicant Name: Hilcorp Energy Company*
- *Applicant Address: 1111 Travis Street, Houston, TX 77002*

If you have any questions or concerns, please contact the undersigned using the information provided below.

Sincerely,

By: HILCORP ENERGY COMPANY,
Its General Partner

Carson Parker Rice
Landman – San Juan Basin
Hilcorp Energy Company
1111 Travis Street
Houston, Texas 77002
713-757-7108 Direct
Email: carice@hilcorp.com

Certified Number	Sender	Recipient	Date Mailed	Delivery Status
9214896900999790180818638 Request Signature via Email	Brittany Thames	, Bureau of Land Management, 6251 College Blvd., Farmington, NM, 87402 Code: CLU 501 SWD Notice	2/17/2022	Delivered, Front Desk/Reception/Mail Roo February 25, 2022 **Signature Pending**
9214896900999790180818639 Request Signature via Email	Brittany Thames	, Enduring Resources IV LLC, 200 Energy Ct., Farmington, NM, 87401 Code: CLU 501 SWD Notice	2/17/2022	Delivered, Left with Individual March 3, 2022 **Signature Pending**
9214896900999790180818640 Request Signature via Email	Brittany Thames	, Dugan Production Corporation, 709 E. Murray Dr., Farmington, NM, 87401 Code: CLU 501 SWD Notice	2/17/2022	Delivered, Individual Picked Up at Post Office March 28, 2022 **Signature Pending**
9214896900999790180818641	Brittany Thames	, Riggs Oil and Gas Corporation, P.O. Box 711, Farmington, NM, 87499 Code: CLU 501 SWD Notice	2/17/2022	Forward Expired March 1, 2022 **Signature Pending**
9214896900999790180818642 Request Signature via Email	Brittany Thames	, Great Western Drilling Company, 700 W. Louisiana Ave., Midland, TX, 79701 Code: CLU 501 SWD Notice	2/17/2022	Delivered, Left with Individual February 22, 2022 **Signature Pending**
9214896900999790180818643 Request Signature via Email	Brittany Thames	, Devon Energy Co. L.P., 333 W. Sheridan Ave., Oklahoma City, OK, 73102 Code: CLU 501 SWD Notice	2/17/2022	Delivered, Individual Picked Up at Postal Facility February 25, 2022 **Signature Pending**
9214896900999790180818644 Request Signature via Email	Brittany Thames	, McHugh Co, 650 S. Cherry No. 1225, Denver, CO, 80246 Code: CLU 501 SWD Notice	2/17/2022	Delivered, Left with Individual February 22, 2022 **Signature Pending**

Well Name: CANYON LARGO UNIT

Well Location: T25N / R7W / SEC 28 / NENW / 36.37562 / -107.5835

County or Parish/State: RIO ARRIBA / NM

Well Number: 501

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMSF078878

Unit or CA Name:

Unit or CA Number:

US Well Number: 3003930811

Well Status: Gas Well Shut In

Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2657074

Type of Submission: Notice of Intent

Type of Action: Convert to Injection or Disposal Well

Date Sundry Submitted: 02/15/2022

Time Sundry Submitted: 06:28

Date proposed operation will begin: 03/15/2022

Procedure Description: Hilcorp San Juan (HSJ) intends to complete the necessary downhole and surface work to convert the Canyon Largo Unit 501 to a saltwater disposal well. This wellbore was originally drilled, and fracture treated in the Dakota by Hunt Energy in 2012. This area of the Dakota is not commercially productive, and the wellbore has remained in shut-in status since completion. HSJ intends to pull the currently installed bare tubing and unset packer and install an injection packer and polylined tubing. Packer fluid will be placed in the tubing casing annulus and a mechanical integrity test will be conducted prior to any injection. An application for authorization to inject (form C-108) will be filed with the New Mexico Oil Conservation Division for the Canyon Largo Unit 501. Procedure below outlines the planned downhole work to prepare the wellbore for MIT and ultimately produced water injection. All surface, facility work will be limited to existing disturbance. See attached procedure.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

BLM_NOI___CLU_501_20220215062752.pdf

Well Name: CANYON LARGO UNIT	**Well Location:** T25N / R7W / SEC 28 / NENW / 36.37562 / -107.5835	**County or Parish/State:** RIO ARRIBA / NM
Well Number: 501	**Type of Well:** CONVENTIONAL GAS WELL	**Allottee or Tribe Name:**
Lease Number: NMSF078878	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number: 3003930811	**Well Status:** Gas Well Shut In	**Operator:** HILCORP ENERGY COMPANY

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: KANDIS ROLAND **Signed on:** FEB 15, 2022 06:28 AM

Name: HILCORP ENERGY COMPANY

Title: Operation Regulatory Tech

Street Address: 382 Road 3100

City: Farmington **State:** NM

Phone: (505) 599-3400

Email address: kroland@hilcorp.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: KENNETH G RENNICK **BLM POC Title:** Petroleum Engineer

BLM POC Phone: 5055647742 **BLM POC Email Address:** krennick@blm.gov

Disposition: Approved **Disposition Date:** 02/15/2022

Signature: Kenneth Rennick

Hilcorp Energy Company

Schematic - Proposed

Well Name: CANYON LARGO UNIT #501

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003930811	C-28-25N-07W			NEW MEXICO	Vertical

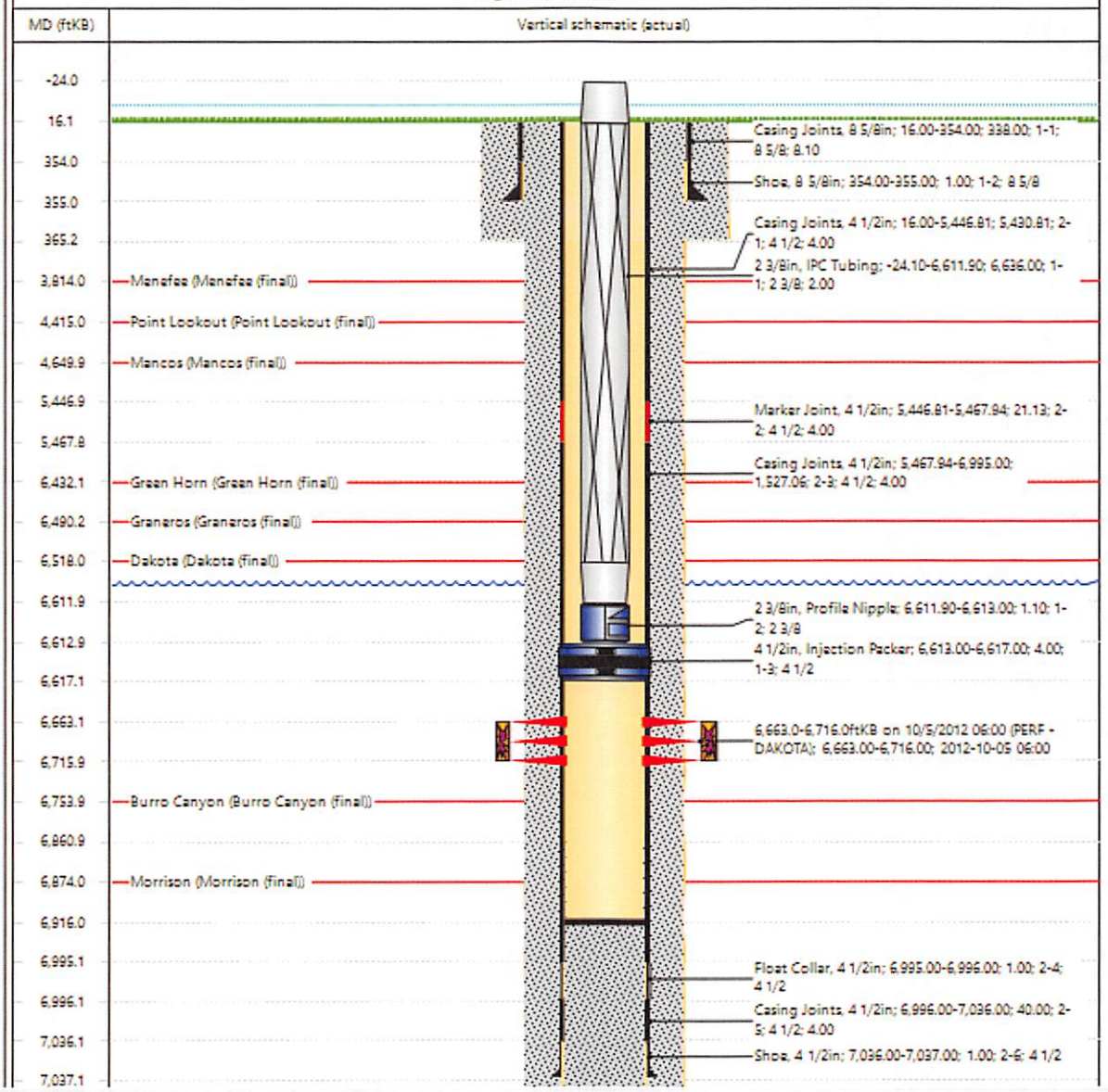
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
6,572.00	16.00	8/15/2012 19:45		Original Hole - 6,916.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
	OTHER		7/21/2015	7/22/2015

TD: 7,045.0

Original Hole [Vertical]



Hilcorp Energy Company

Schematic - Current

Well Name: CANYON LARGO UNIT #501

API / UWI	Surface Legal Location	Field Name	License No.	State/Province	Well Configuration Type
3003930811	C-28-25N-07W			NEW MEXICO	Vertical

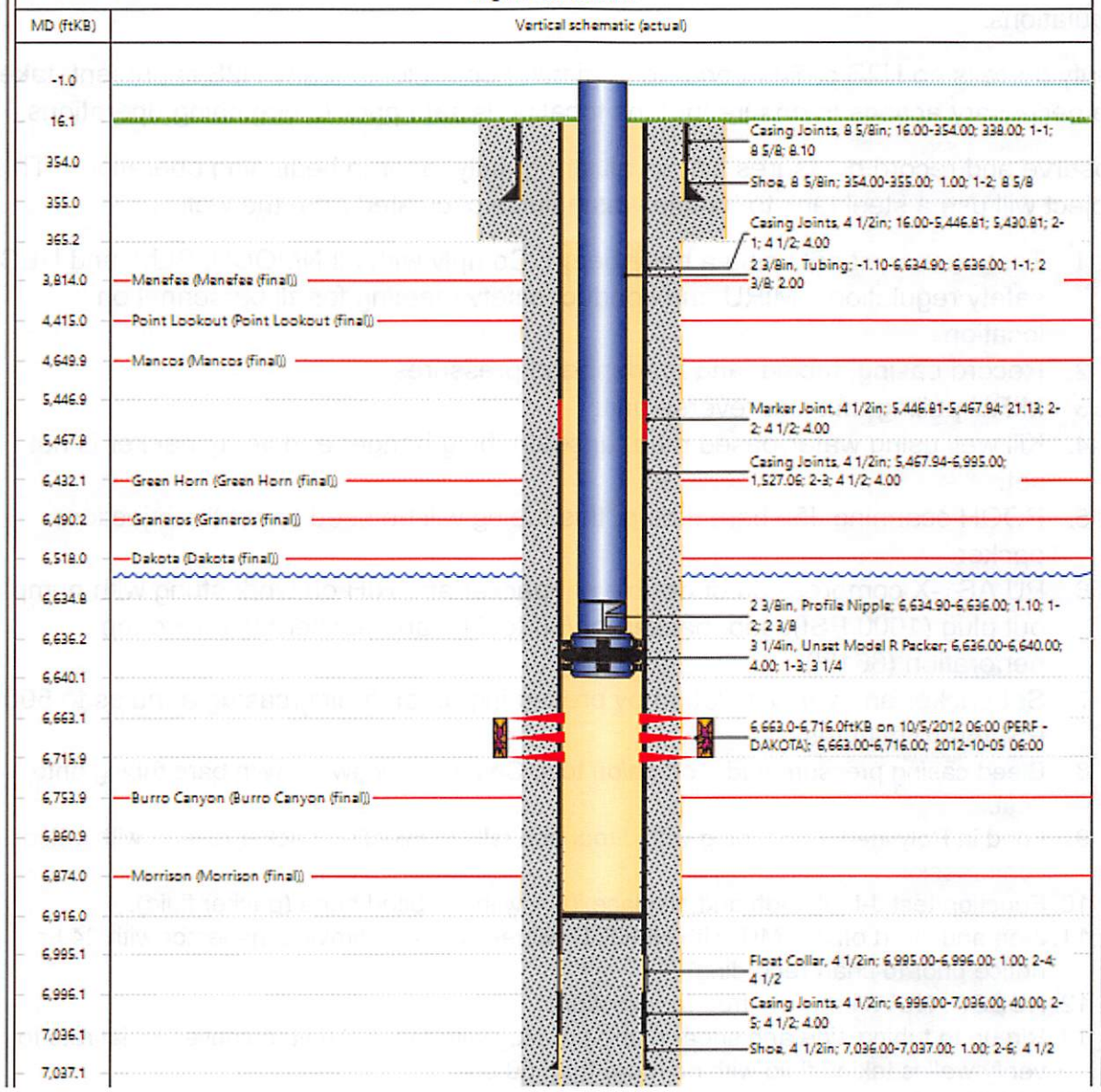
Original KB/RT Elevation (ft)	KB-Ground Distance (ft)	Original Spud Date	Rig Release Date	PBTD (All) (ftKB)	Total Depth All (TVD) (ftKB)
6,572.00	16.00	8/15/2012 19:45		Original Hole - 6,916.0	

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Actual Start Date	End Date
	OTHER		7/21/2016	7/22/2016

TD: 7,045.0

Original Hole [Vertical]



Convert to Saltwater Disposal - NOI

Canyon Largo Unit 501

API # - 3003930811

Procedure:

Hold PJSM prior to beginning any and all operations. Properly document all operations via the JSA process. Ensure that all personnel onsite abide by HEC safety protocol, including PPE, housekeeping, and standard guidelines.

Verify cathodic protection is off and wellhead instrumentation is properly disconnected from the wellhead. Comply with all NMOCD, BLM, and HEC safety and environmental regulations.

Verify there is no H2S present prior to beginning operations. If any H2S is present, take the necessary actions to ensure that the location is safe prior to beginning operations.

Observe and record pressures across all string daily, prior to beginning operations. This project will use a steel tank to handle waste fluids circulated from the well.

1. Test anchors if not using a base beam. Comply with all NMOCD, BLM, and HEC safety regulations. MIRU and conduct safety meeting for all personnel on location.
2. Record casing, tubing, and bradenhead pressures.
3. MIRU pulling unit and reverse unit.
4. Kill well using water-based mud, unseat tubing hanger and verify packer is not set.
5. POOH scanning J55 bare tubing, this tubing will be used to set the injection packer.
6. PU AS1-X compression or double set packer and RIH on work string with pump out plug (1000 PSI), sub, packer, on/off tool to land packer 50' above top perforation (6613').
7. Set packer and verify isolation by pressuring up on tubing/casing annulus to 500 PSI for 10 minutes.
8. Bleed casing pressure and J-off on/off tool. Come out sideways with bare tubing onto float.
9. Load in Polylined J-55 tubing with J tool and tally to injection packer to land with 15k of compression.
10. Function test J-tool, J-off and displace TCA with inhibited brine (packer fluid).
11. J-on and chart official MIT with NMOCD witness on-site (provide inspector with 24 hr. notice prior to chart recording)
12. NDBOP, NUWH and set tree for injection.
13. Rig up to tubing side and shear pump out plug with reverse unit, establish initial rate to verify well is taking fluid with no more than 50 bbl.
14. RDMO pulling unit and reverse unit.