

Submit 1 Copy To Appropriate District
Office
District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM
87505

State of New Mexico
Energy, Minerals and Natural Resources

Form C-103
Revised July 18, 2013

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO. 30-045-35559
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
6. State Oil & Gas Lease No. E-504-16
7. Lease Name or Unit Agreement Name Allison Unit
8. Well Number 152H
9. OGRID Number 372171
10. Pool name or Wildcat Basin Fruitland Coal

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH
PROPOSALS.)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
HILCORP ENERGY COMPANY

3. Address of Operator
382 ROAD 3100 AZTEC, NM 87410

4. Well Location

Unit Letter D 891 feet from the North line and 1162 feet from the West line
Section 21 Township 32N Range 6W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
6155' GR

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☒
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: ☒ Revised Kick Off, Pilot & Entry Pt

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Hilcorp Energy Company would like to revise the kick off, pilot landing, entry point, and window depth of the subject well. Attached is the revised technical plans.

Below is a summary of changes:

Kick off point - moved up the hole f/ 1313' MD to 1250' MD.

Whipstock depth - moved f/ 2968' MD / 2663' TVD to 3080' MD / 2663' TVD.

TD - moved f/ 3242' MD / 2727' TVD to 3380' MD / 2727' TVD.

NMOC

MAY 22 2018

DISTRICT III

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Priscilla Shorty TITLE Operations / Regulatory Technician DATE 5/22/2018

Type or print name Priscilla Shorty

E-mail address: pshorty@hilcorp.com PHONE: 505-324-5188

For State Use Only

APPROVED BY: Chad
Conditions of Approval (if any):

TITLE SUPERVISOR DISTRICT #3 DATE 5/25/18

AY

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Allison Unit COM #152H

Hilcorp Energy Company proposes to drill and complete the referenced horizontal well targeting a coal seam with in the Fruitland formation. The original procedure in the APD was modified to include a pilot hole, which will be fully cased and cemented.

1. Location

Allison Unit COM #152H

SHL: 891' FNL, 1,162' FWL – T32N, R06W, Sec 21 (San Juan)

BHL: 781' FNL, 1957' FWL – T 32N, R06W, Sec 16 (San Juan)

GL: 6,155'

2. Geological Markers

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

Formation	Depth (TVD)	Remarks
Nacimiento	277'	
Ojo Alamo	2,000'	
Kirtland	2,115'	
Fruitland	2,530'	Gas
Big Blue Seam	2,807'	Gas

*See attached directional Plan for anticipated formation tops in measured depth.

3. Pressure Control Equipment

See attached BOPE and choke manifold schematic for a diagram of pressure control equipment.

- BOPE will be nipped up on top of wellhead after surface casing is set and cemented.
- Pressure control configuration will be designated to meet the minimum 2M standards.
- All equipment will have 3M pressure ratings.
- A rotating head will be rigged up on top of annular as seen in attached diagram.

4. Casing & Cement Program

- The proposed casing program is outlined below:

Proposed Casing Program				
Casing	Hole Size	Casing Size	Weight/Grade	Set Depth TVD/MD
Surface	12-1/4"	9-5/8"	32.3# H-40	500' MD/TVD
Intermediate	8-3/4"	7"	23# J-55/L-80	3,380' MD / 2,727' TVD
Production Liner (Pre-Perforated)	6-1/4"	4-1/2"	11.6# J-55/L-80	7,752' MD / 2,690' TVD

The intermediate hole section will be drilled to target depth, then fully cased and cemented with 7" casing.

A whipstock will be run, and window will be cut in the 7" casing above the Blue Mesa formation to allow for a lateral to be drilled in the Blue Mesa. Window depth is 3080' MD / 2663' TVD.

The whipstock will then be recovered. The 4-1/2" liner will be run outside the window, and not tied back into the pilot hole to allow production tubing to be run to near the bottom of the pilot hole. This allows produced water to be evacuated from the production casing.

If the 6-1/4" hole is not drilled to total MD, the production liner setting depth and length will be adjusted accordingly.

The 7" casing string will be set inside the setback boundary line.

b. The proposed cement program is outlined below:

Cement Program				
Interval	Depth (MD)	Volume	Slurry	Planned Cement Top
Surface	500	253 ft ³	Lead Cmt: Type III Cmt 0.25 pps celloflake	Surface
Intermediate	3,380'	720 ft ³	Lead Cmt: Premium Lite 3% CaCl, 0.25 pps celloflake, 5 ppm LCM-1 0.4% FL-52, 8% Bentonite, 0.4%SMS 2.13 ft ³ /sk -- 11.29 gal/sk 12.1 ppg Tail Cmt: Type III 1% CaCl, 0.25 pps celloflake, 0.2% FL-52 1.38 ft ³ /sk -- 6.64 gal/sk 14.6 ppg	Surface
Production	7,752'	N/A	N/A - Open hole with pre-perforated liner.	N/A

Slurry additives may be adjusted as needed to accommodate required pump and compressive test times.

For the intermediate hole section a 2-stage cement job may be performed if hole conditions indicate during operations. Stage tool will be placed appropriately as conditions indicate.

- c. The proposed centralizer program is shown below:

Centralizer Program	
Interval	Centralizers
Surface	1 per joint on bottom 3 joints
Intermediate	10' above shoe joint with collar clamp On top of 2nd, 4th, 6th, 8th, 10th joints 1 every 4th joint to Ojo Alamo 1 every joint through Ojo Alamo 1 Turbolizer will be placed mid-way into Ojo Alamo 1 every 4th joint from top of Ojo Alamo to surface shoe 1 inside surface casing
Production	N/A

To allow adequate time for cement to achieve a minimum of 500 psi compressive strength, a minimum of 8 hours wait on cement time for each hole section will be observed. The wellhead will not be installed, casing will not be tested, and the prior casing shoe will not be drilled out until adequate wait on cement time is achieved.

5. Drilling Fluids

- a. The proposed drilling fluid program is outlined below:

Mud Program			
Interval	Mud Type	Weight (ppg)	Fluid Loss (cc)
Surface	Air / Water Gel System	Air 8.3 - 9.2	NC
Intermediate	LSND / Gel System	8.4 - 9.5	6 - 16
Production	LSND Brine (if needed)*	8.5 - 10	4 - 14

*In the production hole, Brine will be utilized only if a weighting agent is needed to raise MW (for either well control or wellbore stability purposes).

LCM may be added to the mud system if hole conditions indicate.

- b. If brine is utilized, any cuttings drilled with brine will be hauled off to an approved disposal site.

6. Abnormal Pressures and Hazards

- No over-pressured intervals expected.
- Estimated Reservoir Pressure = 1,500 psi
- Maximum Anticipated Surface Pressure = 1,300 psi
- No hydrogen sulfide gas is expected based off nearby well production.

7. Testing, Logging, Coring

Testing, Logging, Coring Procedure		
Evaluation Method	Start Depth	End depth
Mud Logs	KOP	TD
MWD Directional Surveys	KOP	TD
LWD GR	7" window	TD
OH Logs	None planned	
Temp Survey	If needed on intermediate casing	

8. Directional Plan

The planned wellbore directional plan and plot are attached

The planned directional plan is built of geological targets from offset wells. The production hole will be landed and drilled within target formation horizontally utilizing LWD equipment to help steer the wellbore. On site adjustments will be made to the directional plan as formation and hole indicates.

Job Number: AFE1810939D
 Company: Hilcorp Energy Company
 Lease/Well: Allison Unit #154H
 Location: San Juan
 Rig Name: Aztec 777
 RKB: 15
 G.L. or M.S.L.: 6155

State/Country: NM
 Declination: 9.10
 Grid: -.22
 File name: D:\WINSERVE\152H.SVY
 Date/Time: 22-May-18 / 10:29
 Curve Name: Allison Unit #152H Pilot as drilled

Scientific Drilling

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane .00
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

<i>Measured Depth FT</i>	<i>Incl Angle Deg</i>	<i>Drift Direction Deg</i>	<i>True Vertical Depth</i>	<i>N-S FT</i>	<i>E-W FT</i>	<i>Vertical Section FT</i>	<i>CLOSURE Distance FT</i>	<i>Direction Deg</i>	<i>Dogleg Severity Deg/100</i>
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
1250.00	.00	.00	1250.00	.00	.00	.00	.00	.00	.00
2950.00	65.00	.00	2608.11	865.21	.00	865.21	865.21	.00	3.82
3080.00	65.00	.00	2663.05	983.03	.00	983.03	983.03	.00	.00
3380.00	90.00	.00	2727.47	1273.60	.00	1273.60	1273.60	.00	8.33