Santa Fe Main Office
Phone: (505) 476-3441
General Information
Phone: (505) 629-6116

Online Phone Directory Visit:
https://www.emnrd.nm.gov/ocd/contact-us/

State of New Mexico
Energy, Minerals and Natural Resources

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

Form C-103
Revised July 18, 2013

WELL API NO. 05-067-10063/30-045-38453

5. Indicate Type of Lease STATE ☐ FEE ☒

6. State Oil & Gas Lease No.

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.)

7. Lease Name or Unit Agreement Name: Allison Unit

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

8. Well Number 632H

2. Name of Operator: Hilcorp Energy Company

9. OGRID Number: 372171

3. Address of Operator: 382 Road 3100, Aztec, NM 87410

10. Pool name or Wildcat: Mancos

4. Well Location
Unit Letter F (LOT 3) : 478' feet from the North line and 1561' feet from the West line
Section 12 Township 32N Range 07W NMPM County San Juan

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)* 6352' GL

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

| NOTICE OF INTENTION TO: | | | | SUBSEQUENT REPORT OF: | | | |
|---|---|---|---|---|---|---|---|
| PERFORM REMEDIAL WORK | ☐ | PLUG AND ABANDON | ☐ | REMEDIAL WORK | ☐ | ALTERING CASING | ☐ |
| TEMPORARILY ABANDON | ☐ | CHANGE PLANS | ☐ | COMMENCE DRILLING OPNS. | ☐ | P AND A | ☐ |
| PULL OR ALTER CASING | ☐ | MULTIPLE COMPL | ☐ | CASING/CEMENT JOB | ☐ | | |
| DOWNHOLE COMMINGLE | ☐ | | | | | | |
| CLOSED-LOOP SYSTEM | ☐ | | | | | | |
| OTHER: | ☒ | APD Change of Plans | | 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 requests to revise the drilling plans on the above listed well. Currently, the wellheads are split into 2 separate rows, and will now be lined up in a single line. Please see the attached revised plat, technical plans and directional plans.

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 AWalker TITLE Operations/Regulatory Tech Sr. DATE 8/21/2025

Type or print name Amanda Walker E-mail address: mwalker@hilcorp.com PHONE: 346-237-2177

**For State Use Only**

APPROVED BY: TITLE DATE

Conditions of Approval (if any):

FORM 4
Rev 03/22

# State of Colorado
# Energy & Carbon Management Commission

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

| DE | ET | OE | ES |
|---|---|---|---|
| | | | |

Document Number: 404318114

Date Received: 08/15/2025

## SUNDRY NOTICE

This form is required for reports, updates, and requests as specified in the ECMC rules. It is also used to request changes to some aspects of approved permits for Wells and Oil and Gas Locations.

ECMC Operator Number: 10133 Contact Name Amanda Walker
Name of Operator: HILCORP ENERGY COMPANY Phone: (346) 237-2177
Address: P O BOX 61229 Fax: ( )
City: HOUSTON State: TX Zip: 77208 Email: mwalker@hilcorp.com

FORM 4 SUBMITTED FOR:

Facility Type: WELL
API Number : 05- 067 10063 00 ID Number: 489732
Name: ALLISON UNIT Number: 632H
Location QtrQtr: SENW Section: 20 Township: 32N Range: 6W Meridian: N
County: LA PLATA Field Name: IGNACIO BLANCO

Oil & Gas Location(s) and Oil & Gas Development Plan (OGDP) Information

Location(s)

No Location

OGDP(s)

No OGDP

WELL LOCATION CHANGE OR AS-BUILT GPS REPORT

☒ Change of Location for Well * ☐ As-Built GPS Location Report ☐ As-Built GPS Location Report with Survey

* Well Location Change requires a new Plat.

SURFACE LOCATION GPS DATA Data must be provided for Change of Surface Location and As Built Reports.

Latitude 36.998747 Longitude -107.521276
GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Measurement Date: 07/09/2025
Well Ground Elevation: 6352 feet (Required for change of Surface Location.)

WELL LOCATION CHANGE

Well plan is: HORIZONTAL (Vertical, Directional, Horizontal)

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | FNL/FSL | | FEL/FWL | | |
| Change of **Surface** Footage **From**: | | | | | | 479 | FNL | 1485 | FWL | |
| Change of **Surface** Footage **To**: | | | | | | 478 | FNL | 1561 | FWL | |
| Current **Surface** Location **From** | QtrQtr | SENW | Sec | 20 | Twp 32N | Range | 6W | Meridian | N | |
| New **Surface** Location **To** | QtrQtr | SENW | Sec | 12 | Twp 32N | Range | 7W | Meridian | N | |
| Change of **Top of Productive Zone** Footage **From**: | | | | | | 1795 | FNL | 2633 | FWL | |
| Change of **Top of Productive Zone** Footage **To**: | | | | | | 2099 | FNL | 2590 | FWL | ** |
| Current **Top of Productive Zone** Location | | | Sec | 20 | Twp 32N | Range | 6W | | | |
| New **Top of Productive Zone** Location | | | Sec | 20 | Twp 32N | Range | 6W | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Change of **Base of Productive Zone** Footage **From**: | | FNL | | FWL | | |
| Change of **Base of Productive Zone** Footage **To**: | 2117 | FNL | 628 | FEL | ** | |
| Current **Base of Productive Zone** Location | Sec | | Twp | | Range | |
| New **Base of Productive Zone** Location | Sec | 23 | Twp | 32N | Range | 7W |
| Change of **Bottomhole** Footage **From**: | 1761 | FNL | 804 | FEL | | |
| Change of **Bottomhole** Footage **To**: | 2117 | FNL | 804 | FEL | ** | |
| Current **Bottomhole** Location | Sec | 23 | Twp | 32N | Range | 7W |
| New **Bottomhole** Location | Sec | 23 | Twp | 32N | Range | 7W |

** attach deviated drilling plan

## SAFETY SETBACK INFORMATION

Required for change of Surface Location.

Distance from Well to nearest:

| | | |
|---|---|---|
| Building: | 5280 | Feet |
| Building Unit: | 5280 | Feet |
| Public Road: | 5280 | Feet |
| Above Ground Utility: | 5280 | Feet |
| Railroad: | 5280 | Feet |
| Property Line: | 5280 | Feet |

INSTRUCTIONS:
- Specify all distances per Rule 308.b.(1).
- Enter 5280 for distance greater than 1 mile.
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.
- Building Unit – as defined in 100 Series Rules.

## SUBSURFACE MINERAL SETBACKS

Required for change of Top and/or Base of Productive Zone. Enter 5280 for distance greater than 1 mile.

Is this Well within a unit? Yes

If YES:

Enter the minimum distance from the Completed Zone of this Well to the Unit Boundary: 684 Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well within the same unit permitted or completed in the same formation: 1090 Feet

If NO:

Enter the minimum distance from the Completed Zone of this Well to the Lease Line of the described lease: _____ Feet

Enter the minimum distance from the Completed Zone of this Well to the Completed Zone of an offset Well producing from the same lease and permitted or completed in the same formation: _____ Feet

## Exception Location

☐ If this Well requires the approval of a Rule 401.c Exception Location, enter the Rule or spacing order number and attach the Exception Location Request and Waivers. _____

## LOCATION CHANGE COMMENTS

## CHANGE OR ADD OBJECTIVE FORMATION AND/OR SPACING UNIT

| Objective Formation | Formation Code | Spacing Order Number | Unit Acreage | Unit Configuration | Add | Modify | No Change | Delete |
|---|---|---|---|---|---|---|---|---|
| MANCOS | MNCS | 112-304 | 880 | See Comments | | | X | |

OTHER

☐ **RULE 502 VARIANCE**

Order Number: _____

Description: _____

☐ **REMOVE FROM SURFACE BOND** **Signed surface use agreement is a required attachment**

☐ **CHANGE NAME OR NUMBER OF WELL, FACILITY, OIL & GAS LOCATION, OR OGDP**

From: Name ALLISON UNIT Number 632H Effective Date: _____

To: Name _____ Number _____

☐ **ABANDON PERMIT: Permit can only be abandoned if the permitted operation has NOT been conducted. Field inspection will be conducted to verify site status.**

☐ WELL:Abandon Application for Permit-to-Drill (Form2) – Well API Number _____ has not been drilled.

☐ PIT: Abandon Earthen Pit Permit (Form 15) – ECMC Pit Facility ID Number _____ has not been constructed (Permitted and constructed pit requires closure per Rule 911)

☐ CENTRALIZED E&P WASTE MANAGEMENT FACILITY: Abandon Centralized E&P Waste Management Facility Permit (Form 28) – Facility ID Number _____ has not been constructed (Constructed facility requires closure per Rule 907)

OIL & GAS LOCATION ID Number: _____

☐ Abandon Oil & Gas Location Assessment (Form 2A) – Location has not been constructed and site will not be used in the future.

☐ Keep Oil & Gas Location Assessment (Form 2A) active until expiration date. This site will be used in the future.

**Surface disturbance from Oil and Gas Operations must be reclaimed per Rule 1003 and Rule 1004.**

☐ **REQUEST FOR WELL RECORDS CONFIDENTIALITY (Rule 206.c.(1))**

☐ **DIGITAL WELL LOG UPLOAD**

☐ **DOCUMENTS SUBMITTED** Purpose of Submission: _____

☐ **COMPLIANCE with CONDITION OF APPROVAL (COA) on** Form NO: _____ Document Number: _____

RECLAMATION

INTERIM RECLAMATION

☐ Interim Reclamation will commence approximately _____

Per Rule 1003.e.(3) operator shall submit Sundry Notice reporting interim reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

☐ Interim reclamation complete, site ready for inspection.
Per Rule 1003.e(3) describe interim reclamation procedure in Comments below or provide as an attachment and attach required location photographs.

**Field inspection will be conducted to document Rule 1003.e. compliance**

FINAL RECLAMATION

☐ Final Reclamation will commence approximately _____

Per Rule 1004.c.(4) operator shall submit Sundry Notice reporting final reclamation is complete and site is ready for inspection when vegetation reaches 80% coverage.

☐ Final reclamation complete, site ready for inspection. Per Rule 1004.c(4) describe final reclamation procedure in Comments below or provide as an attachment.

**Field inspection will be conducted to document Rule 1004.c. compliance**

☐ Route to the Area Reclamation Specialist

Comments:

ENGINEERING AND ENVIRONMENTAL WORK

☐ REPORT OF TEMPORARY ABANDONMENT

Describe the method used to ensure that the Well is closed to the atmosphere and the Operator's plans for future operation of the Well in the COMMENTS box below as required by Rule 434.b.(1).

☐ REQUEST FOR TEMPORARY ABANDONMENT EXCEEDING 6 MONTHS

State the reason for the extension request and explain the Operator's plans for future operation of the Well in the COMMENTS box below as required by Rule 434.b.(3).

Date well temporarily abandoned _____

Has Production Equipment been removed from site? _____

Mechanical Integrity Test (MIT) required. Date of last MIT _____

TECHNICAL ENGINEERING AND ENVIRONMENTAL WORK

Details of work must be described in full in the COMMENTS below or provided as an attachment.

☒ NOTICE OF INTENT/REQUEST FOR APPROVAL Approximate Start Date 10/01/2025

☐ SUBSEQUENT REPORT Date of Activity _____

☐ Bradenhead Plan ☐ Venting or Flaring (Rule 903) ☐ E&P Waste Mangement

☒ Change Drilling Plan ☐ Repair Well ☐ Beneficial Reuse of E&P Waste

☐ Gross Interval Change

☐ Underground Injection Control

☐ Request approval of Reuse and Recycling Plan per Rule 905.a.(3). (Reuse and Recycling Plan must be attached.)

☐ Request approval of Alternative Sampling Plan per Rule 909.j.(6). for this Pit. (Alternative Sampling Program must be attached.)

☐ Other _____

☐ Request that an existing produced water sample from the same formation be used per Rule 909.j.(6) to meet the requirements of Rule 909.j.(1)-(5) for this Well.

Pit ID _____ Pit Name _____

(No Sample Provided)

☐ Subsequent well operations with heavy equipment (Rule 312)

(No Well Provided)

COMMENTS:

GAS CAPTURE

VENTING AND FLARING:

Operation type: _____ Operational phase requiring venting/flaring: _____

Reason for venting/flaring: _____

Describe Other reason for venting/flaring:

Describe why venting or flaring is necessary. If reporting per Rule 903.b.(2), 903.c.(3).C, or 903.d.(2), include the explanation, rationale, and cause of the event:

Describe how the operation will protect and minimize adverse impacts to public health, safety, welfare, the environment, and wildlife resources. If reporting per Rule 903.d.(2), include BMPs used to minimize venting on the BMP Tab:

Total volume of gas vented or flared: _____ mcf ☐ estimated ☐ measured

Total duration of emission event: _____ hours ☐ consecutive ☐ cumulative

Submit a single representative gas analysis via Form 43 to create a Sample Site Facility ID# for this Location. Reference the Form 43 document number on the Related Forms tab.

Sample Site Facility ID#: _____

GAS CAPTURE PLAN

Describe the plan to connect to a gathering line or beneficially use the gas; include anticipated timeline:

A Gas Capture Plan that meets the requirements of Rule 903.e is attached. ☐

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Grade | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|---|---|---|---|---|---|---|---|---|---|
| SURF | 17+1/2 | 13+3/8 | J55 | 54.5 | 0 | 700 | 705 | 700 | 0 |
| 1ST | 12+1/4 | 9+5/8 | L80 | 43.5 | 0 | 6959 | 680 | 6659 | 0 |
| 2ND | 8+1/2 | 5+1/2 | P110 | 20 | 0 | 21326 | 3109 | 21326 | 5000 |

POTENTIAL FLOW AND CONFINING FORMATIONS

| Zone Type | Formation /Hazard | Top M.D. | Top T.V.D. | Bottom M.D. | Bottom T.V.D. | TDS (mg/L) | Data Source | Comment |
|---|---|---|---|---|---|---|---|---|
| Groundwater | San Jose | 0 | 0 | 848 | 848 | 0-500 | USGS | Possible Water |
| Groundwater | Nacimiento | 848 | 848 | 2151 | 2084 | 0-500 | USGS | Possible Water |
| Groundwater | Ojo Alamo | 2151 | 2084 | 2222 | 2150 | 501-1000 | USGS | Possible Water |
| Groundwater | Kirtland | 2222 | 2150 | 2684 | 2581 | 1001-10000 | USGS | Gas & Water |
| Hydrocarbon | Fruitland | 2684 | 2581 | 3079 | 2950 | 1001-10000 | USGS | Gas & Water |
| Hydrocarbon | Pictured Cliffs | 3079 | 2950 | 3633 | 3467 | | | Possible Gas |
| Confining Layer | Lewis Shale | 3633 | 3467 | 5169 | 4900 | | | None |
| Hydrocarbon | Cliffhouse | 5169 | 4900 | 5570 | 5274 | | | Possible Gas |
| Confining Layer | Menefee | 5570 | 5274 | 5764 | 5455 | | | None |
| Hydrocarbon | Point Lookout | 5764 | 5455 | 6321 | 5974 | | | Gas |
| Hydrocarbon | Mancos | 6321 | 5974 | 6521 | 6174 | | | Gas |

H2S REPORTING

☐ **Intentional release of H2S gas due to Upset Condition or malfunction.**

☐ **Intent to temporarily abandon well with potential H2S concentration >100 ppm.**

**Data Fields in this section are intended to document Sample and Location Data associated with the collection of a Gas Sample that is submitted for Laboratory Analysis.**

**Gas Analysis Report must be attached.**

H2S Concentration: _____ in ppm (parts per million) Date of Measurement or Sample Collection _____

Description of Sample Point:

Absolute Open Flow Potential _____ in CFPD (cubic feet per day)

Description of Release Potential and Duration (If flow is not open to the atmosphere, identify the duration in which the container or pipeline would likely be opened for servicing operations.):

Distance to nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent: _____

Distance to nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use: _____

COMMENTS:

OIL & GAS LOCATION UPDATES

OGDP ID _____ OGDP Name _____

**SITE EQUIPMENT LIST UPDATES**

Indicate the number and type of major equipment components planned for use on this Oil and Gas Location:

| | | | | |
|---|---|---|---|---|
| Wells | Oil Tanks | Condensate Tanks | Water Tanks | Buried Produced Water Vaults |
| Drilling Pits | Production Pits | Special Purpose Pits | Multi-Well Pits | Modular Large Volume Tank |
| Pump Jacks | Separators | Injection Pumps | Heater-Treaters | Gas Compressors |
| Gas or Diesel Motors | Electric Motors | Electric Generators | Fuel Tanks | LACT Unit |
| Dehydrator Units | Vapor Recovery Unit | VOC Combustor | Flare | Enclosed Combustion Devices |
| Meter/Sales Building | Pigging Station | | Vapor Recovery Towers | |

**OTHER PERMANENT EQUIPMENT UPDATES**

**OTHER TEMPORARY EQUIPMENT UPDATES**

**CULTURAL AND SAFETY SETBACK UPDATES**

**OTHER LOCATION CHANGES AND UPDATES**

Provide a description of other changes or updates to technical information for this Location:

POTENTIAL OGDP UPDATES

PROPOSED CHANGES TO AN APPROVED OGDP

☐ This Sundry Form 4 is being submitted pursuant to Rule 301.c to propose changes to an approved Oil and Gas Development Plan.

Check all boxes that pertain to the type(s) of changes being proposed for this OGDP:

- ☐ Add Oil and Gas Location(s)
- ☐ Amend Oil and Gas Location(s)
- ☐ Remove Oil and Gas Location(s)
- ☐ Oil and Gas Location attachment or plan updates
- ☐ Other
- ☐ Add Drilling and Spacing Unit(s)
- ☐ Amend Drilling and Spacing Unit(s)
- ☐ Remove Drilling and Spacing Unit(s)
- ☐ Amend the lands subject to the OGDP

Provide a detailed description of the changes being proposed for this OGDP. Attach supporting documentation such as maps if necessary.

## Operator Best Management Practices

| No | BMP/COA Type | Description |
|---|---|---|
| | | |

Operator Comments:

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

Signed: _____ Print Name: Amanda Walker

Title: Regulatory Tech Sr. Email: mwalker@hilcorp.com Date: 8/15/2025

Based on the information provided herein, this Sundry Notice (Form 4) complies with ECMC Rules and applicable orders and is hereby approved.

ECMC Approved: Wang, Jian Date: 8/20/2025

## CONDITIONS OF APPROVAL, IF ANY LIST

| COA Type | Description |
|---|---|
| | This Form 4 makes changes to the approved Form 2 and must be displayed with the Form 2 while drilling. Form 2 COA still apply. |
| | BHL is outside the unit (508' from western unit boundary Sec 23. 600' western unit boundary setback). Operator will ensure the wellbore beyond the unit boundary setback is physically isolated and is not completed. In the Operator Comments on the Form 5A the operator will (1) report the footages from the section lines of the bottom of the completed interval (2) describe how the wellbore beyond the unit boundary setback is physically isolated and (3) certify that none of the wellbore beyond the setback was completed. |
| 2 COAs | |

## General Comments

| User Group | Comment | Comment Date |
|---|---|---|
| Engineer | Offset well evaluation has no changes to Form 2 COA. | 08/20/2025 |
| Total: 1 comment(s) | | |

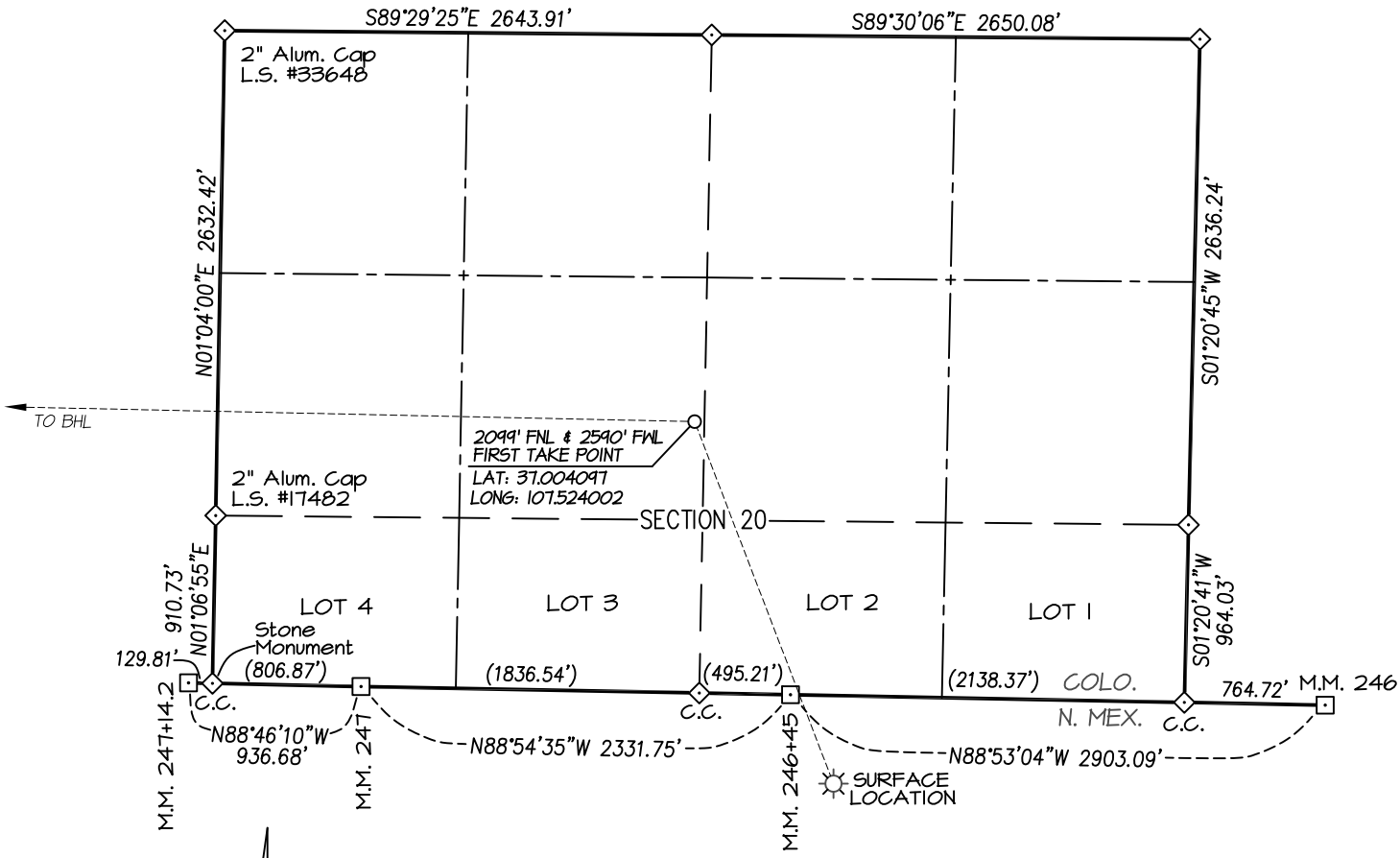
## ATTACHMENT LIST

| Att Doc Num | Name |
|---|---|
| 404318114 | SUNDRY NOTICE APPROVED-LOC-SFTY-STBK-MNRL-STBK-OBJ-DRLG-CSG |
| 404318117 | DIRECTIONAL DATA |
| 404318119 | OPERATIONS SUMMARY |
| 404318120 | WELL LOCATION PLAT |
| 404323749 | FORM 4 SUBMITTED |

Total Attach: 5 Files

# HILCORP ENERGY COMPANY: ALLISON UNIT #632H

**SURFACE LOCATION: 478' FNL & 1561' FWL**
**SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'**
**BOTTOM HOLE LOCATION: 2117' FNL, 804' FEL**
**SECTION 23, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.**




⊡ denotes found 1925 Supreme Court Mile Marker Brass Tab

◇ denotes found 3-1/4" alum. cap L.S. #23894 unless otherwise noted.

N

GRAPHIC SCALE 1"=1000'

0 1000 2000

NOTE:

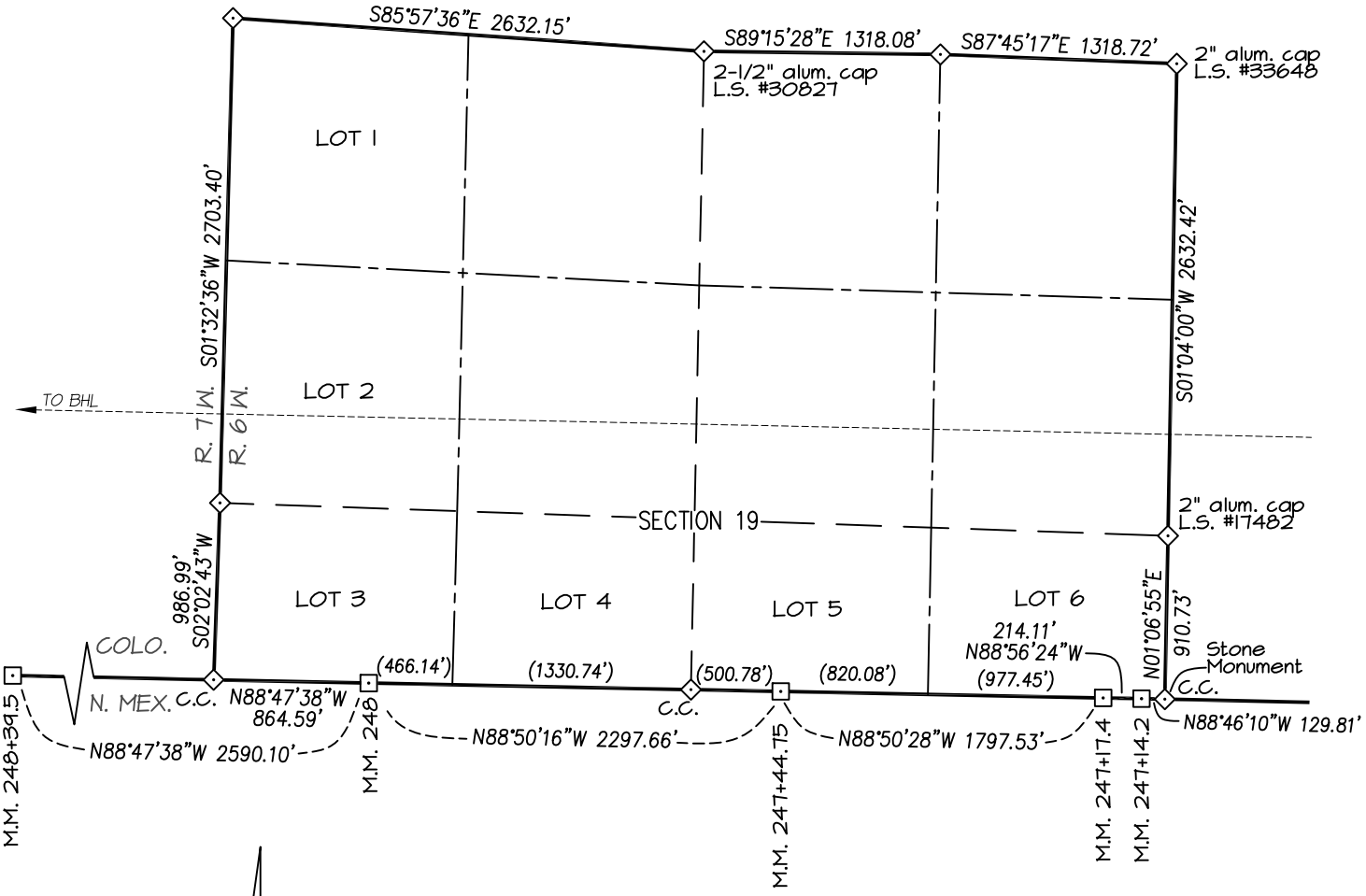
SEE SHEET 5 OF 5 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

**SHEET 1 OF 5**

| | |
|---|---|
| SURVEYED: 12/11/24 | PREPARED FOR: |
| DRAWN: 7/9/25 | HILCORP ENERGY COMPANY |
| JOB NO. HC005 | |
| DRAWN BY: K.R. | NORTHSTAR |
| CHECKED BY: K.R. | SURVEYING & MAPPING, INC. |
| FILE NO.: 632WP1 | 768 County Rd. 308 |
| | DURANGO, CO. 81303 |
| | (970) 385-0851 |

# HILCORP ENERGY COMPANY: ALLISON UNIT #632H

**SURFACE LOCATION: 478' FNL & 1561' FWL**
**SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'**
**BOTTOM HOLE LOCATION: 2117' FNL, 804' FEL**
**SECTION 23, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.**




⊡ denotes found 1925 Supreme Court Mile Marker Brass Tab

◇ denotes found 3-1/4" alum. cap L.S. #12027 unless otherwise noted.

N

GRAPHIC SCALE 1"=1000'

0 1000 2000

NOTE:

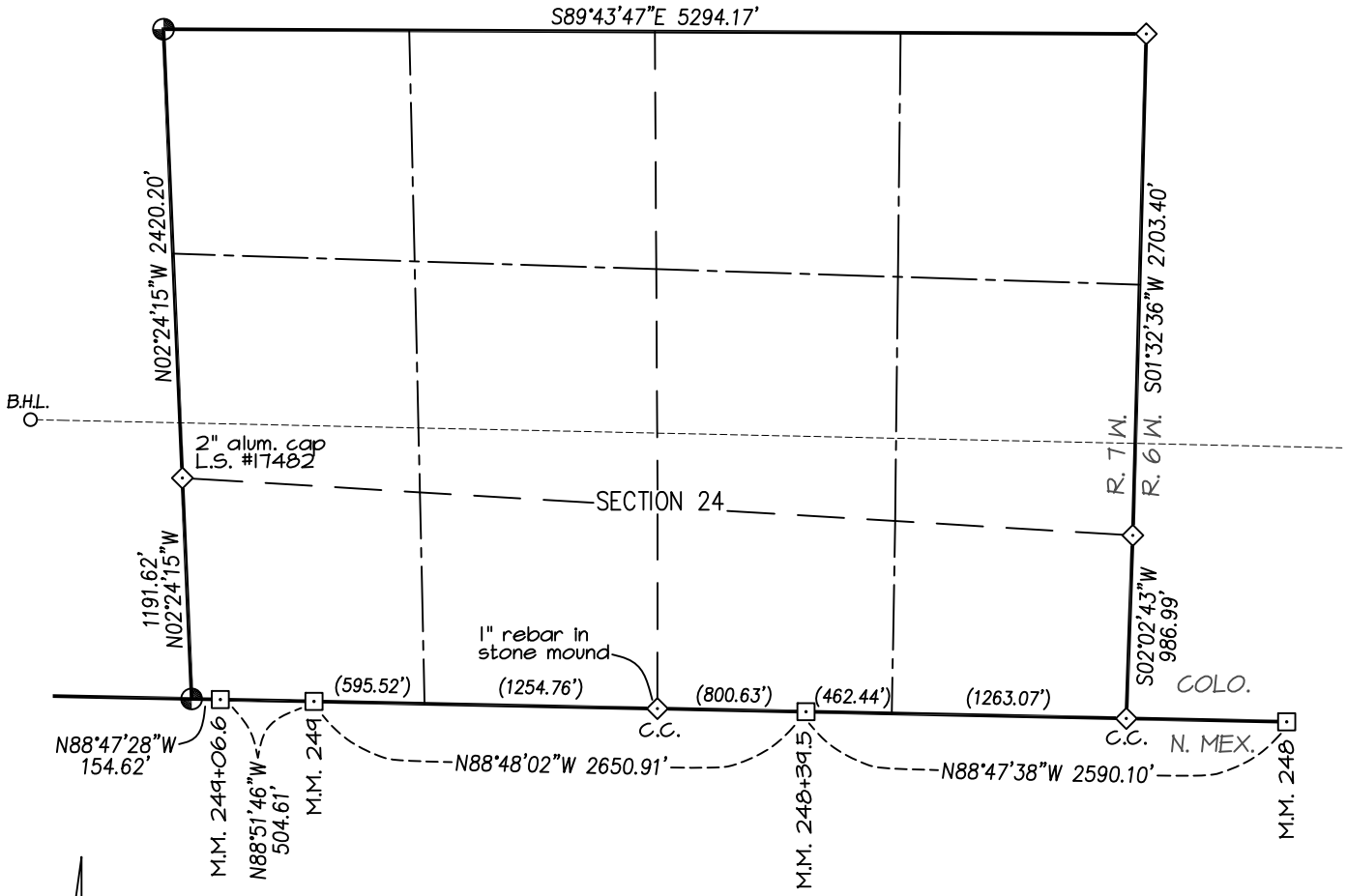
SEE SHEET 5 OF 5 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

**SHEET 2 OF 5**

| | |
|---|---|
| SURVEYED: 12/11/24 | PREPARED FOR: |
| DRAWN: 7/9/25 | HILCORP ENERGY COMPANY |
| JOB NO. HC005 | |
| DRAWN BY: K.R. | NORTHSTAR |
| CHECKED BY: K.R. | SURVEYING & MAPPING, INC. |
| FILE NO.: 632WP2 | 768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851 |

# HILCORP ENERGY COMPANY: ALLISON UNIT #632H

**SURFACE LOCATION: 478' FNL & 1561' FWL**
**SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'**
**BOTTOM HOLE LOCATION: 2117' FNL, 804' FEL**
**SECTION 23, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.**





◓ and ◒ denote found 3-1/4" S.U.I.R. Alum. Cap unless otherwise noted.

⊡ denotes found 1925 Supreme Court Mile Marker Brass Tab

◇ denotes found 3-1/4" alum. cap L.S. #12027 unless otherwise noted.

GRAPHIC SCALE 1"=1000'

0 1000 2000

NOTE:

SEE SHEET 5 OF 5 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

**SHEET 3 OF 5**

| | |
|---|---|
| DRAWN BY: K.R. | SURVEYED: 12/11/24 |
| CHECKED BY: K.R. | DRAWN: 7/9/25 |
| FILE NO.: 632WP3 | JOB NO. HC005 |

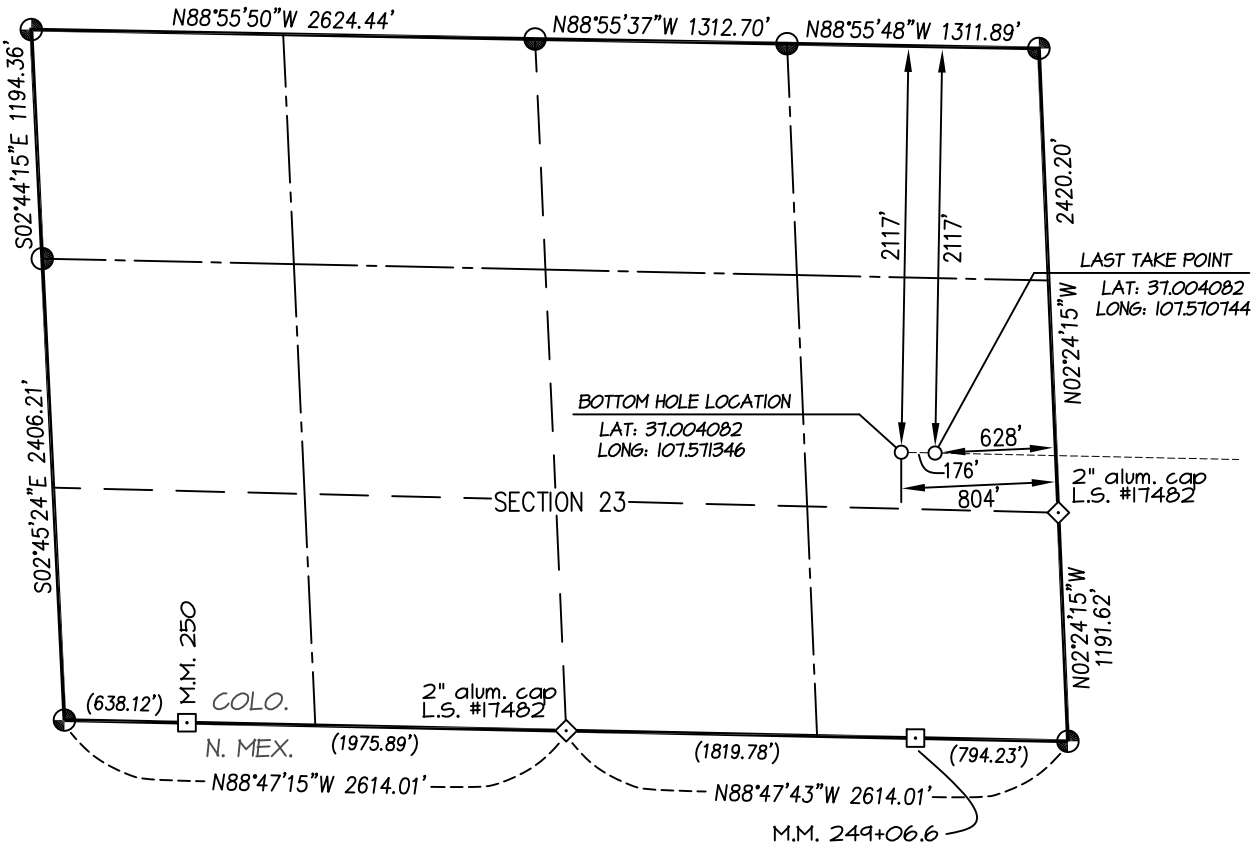
PREPARED FOR:

**HILCORP ENERGY COMPANY**

NORTHSTAR
SURVEYING & MAPPING, INC.
768 County Rd. 308
DURANGO, CO. 81303
(970) 385-0851

# HILCORP ENERGY COMPANY: ALLISON UNIT #632H

**SURFACE LOCATION: 478' FNL & 1561' FWL**
**SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'**
**BOTTOM HOLE LOCATION: 2117' FNL, 804' FEL**
**SECTION 23, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.**





◓ and ◒ denote found 3-1/4" S.U.I.R. Alum. Cap unless otherwise noted.

⊡ denotes found 1925 Supreme Court Mile Marker Brass Tab

◇ denotes found 3-1/4" alum. cap L.S. #12027 unless otherwise noted.

GRAPHIC SCALE 1"=1000'

0 1000 2000

NOTE:

SEE SHEET 5 OF 5 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

**SHEET 4 OF 5**

| | |
|---|---|
| SURVEYED: 12/11/24 | PREPARED FOR: |
| DRAWN: 7/9/25 | HILCORP ENERGY COMPANY |
| JOB NO. HC005 | |
| DRAWN BY: K.R. | NORTHSTAR |
| CHECKED BY: K.R. | SURVEYING & MAPPING, INC. |
| FILE NO.: 6.32WP4 | 768 County Rd. 308<br>DURANGO, CO. 81303<br>(970) 385-0851 |

# HILCORP ENERGY COMPANY: ALLISON UNIT #632H

**SURFACE LOCATION: 478' FNL & 1561' FWL**
**SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'**
**BOTTOM HOLE LOCATION: 2117' FNL, 804' FEL**
**SECTION 23, T-32-N, R-7-W, N.M.P.M., LA PLATA COUNTY, COLORADO.**

| ALLISON UNIT #632H | CSZ NAD '83 | NAD '83 | TIES | SEC/TWP/RNG |
|---|---|---|---|---|
| SURFACE HOLE LOCATION | N (Y) = 1,127,305.15'<br>E (X) = 2,409,728.17' | LAT: 36.998747°N<br>LONG: 107.521276°W | 478' FNL<br>1561' FWL | SECTION 12 (N. MEX.)<br>T-32-N, R-7-W |
| FIRST TAKE POINT | N (Y) = 1,129,269.89'<br>E (X) = 2,408,974.36' | LAT: 37.004097°N<br>LONG: 107.524002°W | 2099' FNL<br>2590' FWL | SECTION 20 (COLO.)<br>T-32-N, R-6-W |
| LAST TAKE POINT | N (Y) = 1,129,563.70'<br>E (X) = 2,395,327.34' | LAT: 37.004082°N<br>LONG: 107.570744°W | 2117' FNL<br>628' FEL | SECTION 23 (COLO.)<br>T-32-N, R-7-W |
| BOTTOM HOLE LOCATION | N (Y) = 1,129,567.46'<br>E (X) = 2,395,151.66' | LAT: 37.004082°N<br>LONG: 107.571346°W | 2117' FNL<br>804' FEL | SECTION 23 (COLO.)<br>T-32-N, R-7-W |

NOTES:

1. WELL LOCATION FOOTAGE CALLS MEASURED PERPENDICULAR TO SECTION LINES.
2. WELL GPS OBSERVATION PERFORMED BY JASON EDWARDS ON 12/11/24 – PDOP VALUE = 1.7
3. BEARINGS & DISTANCE SHOWN ARE FIELD MEASURED UNLESS OTHERWISE NOTED.
4. ALL MEASURED DISTANCES SHOWN ARE GRID DISTANCE WITH NO SCALE FACTOR APPLIED.
5. BEARINGS ARE BASED ON THE NORTH AMERICAN DATUM OF 1983, COLORADO SOUTH STATE PLANE COORDINATE SYSTEM, ZONE 0503.
6. ELEVATION IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (GEOID18).

COLORADO REGISTERED
KENNETH E. REA
31941
7-10-25
PROFESSIONAL LAND SURVEYOR

I, KENNETH E. REA, A REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THE WELL LOCATION SHOWN ON THIS PLAT IS ACCURATELY PLOTTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE UNDER MY DIRECT SUPERVISION, AND THAT THIS PLAT IS NOT A LAND SURVEY PLAT OR IMPROVEMENT SURVEY PLAT, AND THAT IT IS NOT TO BE RELIED UPON FOR THE ESTABLISHMENT OF FENCE, BUILDING, OR OTHER FUTURE IMPROVEMENT LINES.

SHEET 5 OF 5

| | | |
|---|---|---|
| SURVEYED: 12/11/24 | DRAWN: 7/9/25 | JOB NO. HC005 |
| DRAWN BY: K.R. | CHECKED BY: K.R. | FILE NO.: 632WP5 |

PREPARED FOR:
HILCORP ENERGY COMPANY

NORTHSTAR
SURVEYING & MAPPING, INC.
768 County Rd. 308
DURANGO, CO. 81303
(970) 385-0851

| C-102<br>Submit Electronically Via OCD Permitting | State of New Mexico<br>Energy, Minerals & Natural Resources Department<br>OIL CONSERVATION DIVISION | Revised July 9, 2024<br>Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled |
|---|---|---|

## WELL LOCATION INFORMATION

| API Number | Pool Code | Pool Name |
|---|---|---|
| 0506710063/3004538453 | 97232 | BASIN MANCOS |

| Property Code | Property Name | Well Number |
|---|---|---|
| 318864 | ALLISON UNIT | 632H |

| OGRID No. | Operator Name | Ground Level Elevation |
|---|---|---|
| 372171 | HILCORP ENERGY COMPANY | 6352' |

Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

Mineral Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal

### Surface Location

| UL | Section | Township | Range | Lot | Feet from N/S Line | Feet from E/W Line | Latitude | Longitude | County |
|---|---|---|---|---|---|---|---|---|---|
| F | 12 | 32N | 7W | 3 | 478' NORTH | 1561' WEST | 36.998747 °N | -107.521276 °W | SAN JUAN (NM) |

### Bottom Hole Location

| UL | Section | Township | Range | Lot | Feet from N/S Line | Feet from E/W Line | Latitude | Longitude | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 23 | 32N | 7W | | 2117' NORTH | 804' EAST | 37.004082 °N | -107.571346 °W | LA PLATA (CO) |

Penetrated Spacing Unit:

| Dedicated Acres | | Infill or Defining Well | Defining Well API | Overlapping Spacing Unit | Consolidation Code |
|---|---|---|---|---|---|
| 880.87 | Lots 1 & 2, E/2 NW/4, NE/4 – Section 19, T32N, R6W<br>NW/4 – Section 20, T32N, R6W<br>E/2 NE/4 – Section 23, T32N, R7W<br>N/2 – Section 24, T32N, R7W | Defining | N/A | ☐ Yes ☒ No | Unit |

Order Numbers

Well setbacks are under Common Ownership: ☒ Yes ☐ No

### Kick Off Point (KOP)

| UL | Section | Township | Range | Lot | Feet from N/S Line | Feet from E/W Line | Latitude | Longitude | County |
|---|---|---|---|---|---|---|---|---|---|
| F | 12 | 32N | 7W | 3 | 478' NORTH | 1561' WEST | 36.998747 °N | -107.521276 °W | SAN JUAN (NM) |

### First Take Point (FTP)

| UL | Section | Township | Range | Lot | Feet from N/S Line | Feet from E/W Line | Latitude | Longitude | County |
|---|---|---|---|---|---|---|---|---|---|
| F | 20 | 32N | 6W | | 2099' NORTH | 2590' WEST | 37.004097 °N | -107.524002 °W | LA PLATA (CO) |

### Last Take Point (LTP)

| UL | Section | Township | Range | Lot | Feet from N/S Line | Feet from E/W Line | Latitude | Longitude | County |
|---|---|---|---|---|---|---|---|---|---|
| H | 23 | 32N | 7W | | 2117' NORTH | 628' EAST | 37.004082 °N | -107.570744 °W | LA PLATA (CO) |

| Unitized Area or Area of Uniform Interest | Spacing Unit Type | Ground Floor Elevation |
|---|---|---|
| ALLISON UNIT | ☒ Horizontal ☐ Vertical ☐ Directional | |

### OPERATOR CERTIFICATION

*I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.*

*If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.*

Signature

8/1/2025
Date

Amanda Walker
Printed Name

mwalker@hilcorp.com
E-mail Address

### 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 belief.*

JASON C. EDWARDS NEW MEXICO 15269 7/17/2025 REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS

Signature and Seal of Professional Surveyor

| Certificate Number | Date of Survey |
|---|---|
| 15269 | DECEMBER 11, 2024 |

Note: 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.

# HILCORP ENERGY COMPANY ALLISON UNIT #632H
## 478' FNL & 1561' FWL, SECTION 12, T32N, R7W, NMPM
## SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6352'
## LAT 36.998747°N LONG –107.521276°W DATUM: NAD1983

3647.5' TOTAL LENGTH OF ACCESS
31.6' SAN JUAN COUNTY ( CR #4020 )
3570.6' SEAN & DAWNETTE WASHBURN
45.3' BRYCE SEAN WASHBURN

GRAPHIC SCALE 1"=100'
0 100 200

~ FEE SURFACE OWNERS ~
Bryce Sean Washburn & Sean and Dawnette Washburn

Sean & Dawnette Washburn 0.41 Acres

Area of Total Disturbance 10.30 Acres

Bryce Sean Washburn 9.89 Acres

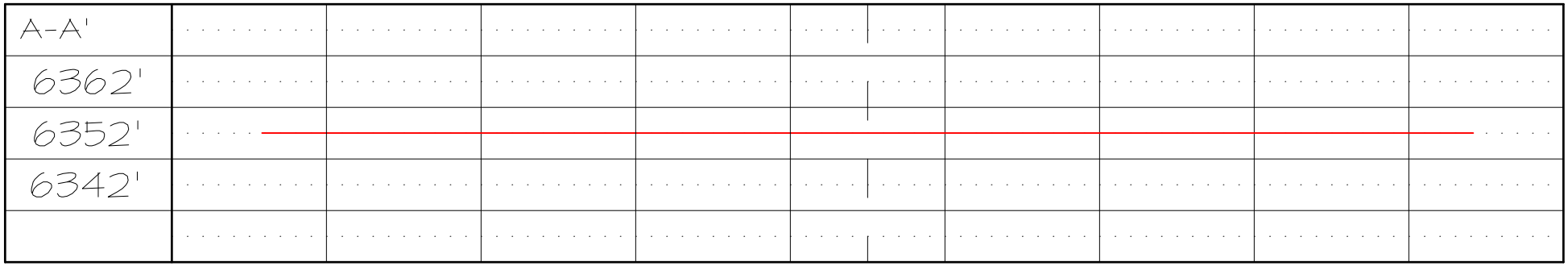
POND
IRRIGATION DITCH
IRRIGATION DITCH
FENCE-LINE
EXISTING ROADWAY
HILCORP WATERLINE
~ FENCE-LINE ~ OWNERSHIP CHANGE ~
700'
TOTAL ACCESS 3647.5' ( 0-6% )
EXISTING ROADWAY
HILCORP WATERLINE
HARVEST PIPELINE
EXISTING 24" CULVERT
EXISTING 24" CULVERT
METER RUNS
SOLAR PANEL
SEPARATORS
FENCE AROUND EXISTING WELLPAD
HILCORP ALLISON #13N WELLHEAD
78'
49'
100'
15'
HILCORP ALLISON #13P WELLHEAD
PIT
TANK
TANK
SOLAR PANEL
CATHODIC GROUNDBED
FENCE AROUND EXISTING WELLPAD
Wellhead to back 403'
S02°W 197' LAYDOWN Wellhead to front
20' 20' 20' 20' 20'
A01 632H A03 A04 A05 A06
235'
235'
235'
235'
489'
185'
69'
97'
350'
300'
40'
A
A'
B
B'
C
C'
-0-
1
2
3
4
5
6
~ SECTION LINE ~ COLORADO / NEW MEXICO STATE-LINE ~ SECTION LINE ~
~ 1/16th SECTION LINE ~ OWNERSHIP CHANGE ~ FENCE-LINE ~ 1/16th SECTION LINE ~

A01 - ALLISON UNIT #633H
A02 - ALLISON UNIT #632H
A03 - ALLISON UNIT #631H
A04 - ALLISON UNIT #614H
A05 - ALLISON UNIT #630H
A06 - ALLISON UNIT #611H

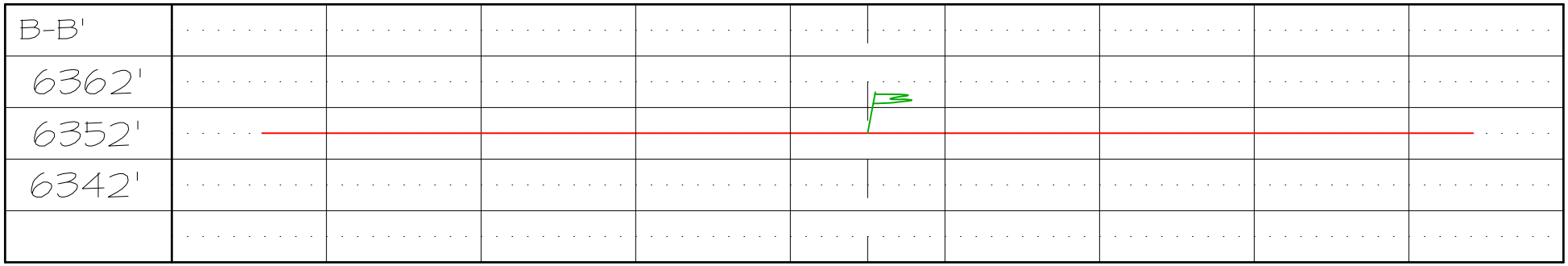
Steel T-Posts have been set to define Edge of Disturbance which is 50' wide, unless otherwise noted.

# HILCORP ENERGY COMPANY ALLISON UNIT #632H
# 478' FNL & 1561' FWL, SECTION 12, T32N, R7W, NMPM
# SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6352'

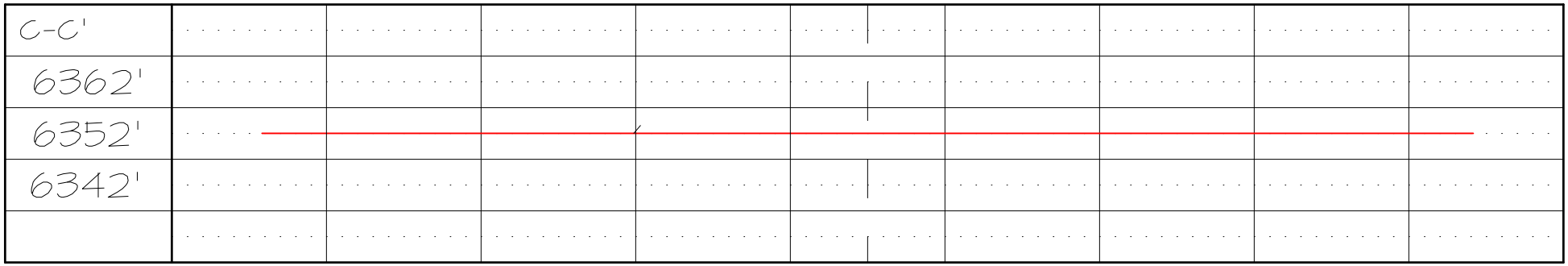
HORIZONTAL SCALE 1"=60' C/L VERTICAL SCALE 1"=30'




C/L




C/L

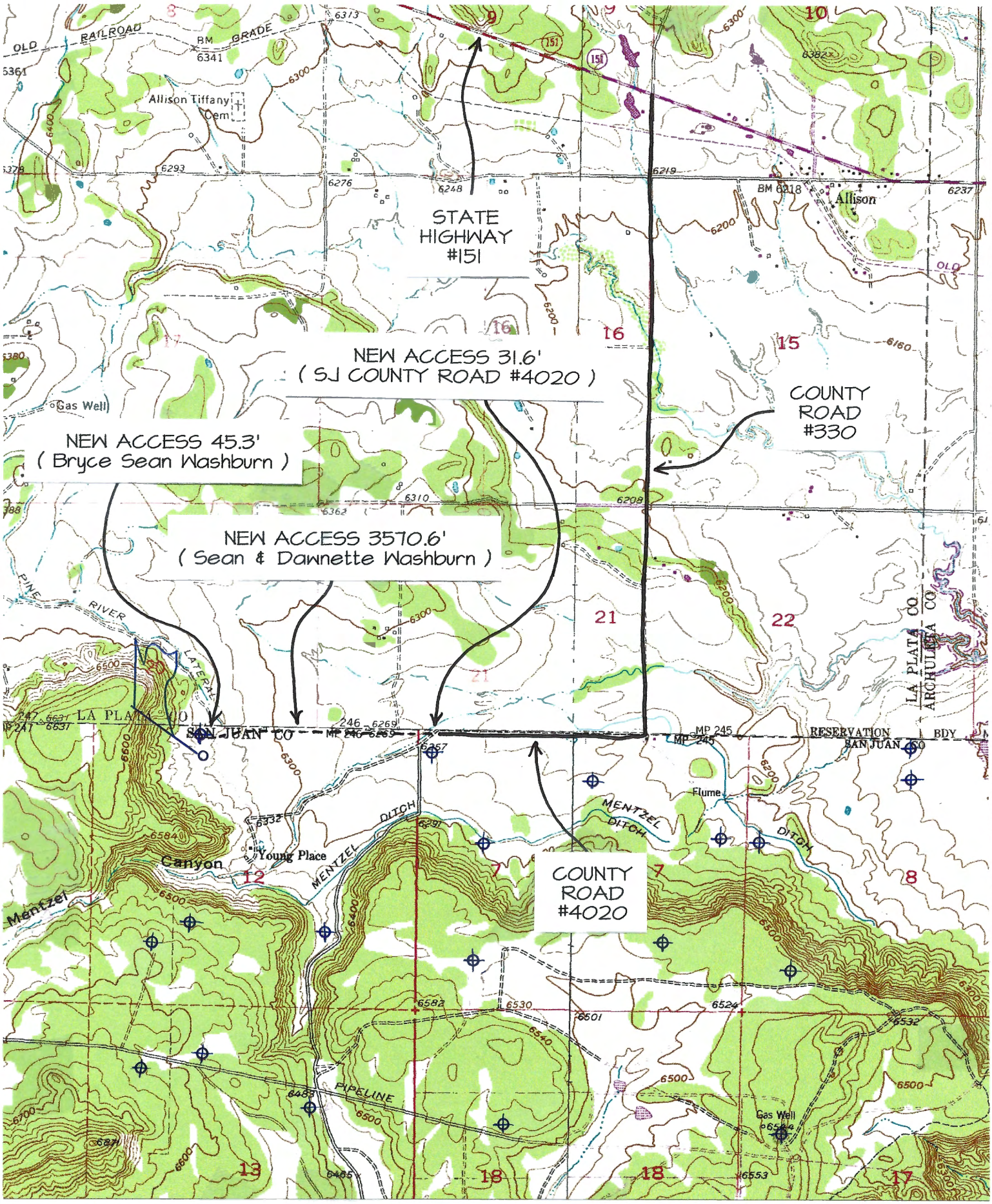



EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.

# HILCORP ENERGY COMPANY ALLISON UNIT #632H

478' FNL & 1561' FWL, SECTION 12, T32N, R7W, N.M.P.M.
SAN JUAN COUNTY, NEW MEXICO




TOPO NAME : BURNT MESA ⊕ PRODUCING WELL ⊗ PLUGGED & ABANDONED WELL

**Directions from Intersection of State Hwy 172 & State Hwy 151 in Ignacio, CO**

**to Hilcorp Energy Company Allison Unit #632H**

**478' FNL & 1561' FWL, Section 12, T32N, R7W, N.M.P.M., San Juan County, NM**

**Latitude 36.998747°N Longitude -107.521276°W Datum: NAD1983**

From the intersection of State Hwy 172 & State Hwy 151 in Ignacio, CO, travel Easterly on State Hwy 151 for 12.0 miles to County Road #330:

Go Right (Southerly) on County Road #330 for 1.9 miles to County Road #4020;

Go Right (Westerly) on County Road #4020 for 0.6 miles to new access on right-hand side which continues for 3647.5' to Hilcorp Allison Unit #632H existing wellpad.

La Plata County, CO Allison Unit 632H

Hilcorp

# Technical Drilling Plan (Rev. 2)

Hilcorp Energy Company proposes to drill and complete the referenced horizontal well targeting the Mancos formation.

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

## 1. Location

| | | | |
|---|---|---|---|
| Date: | July 22, 2025 | Pool: | Basin Mancos |
| Well Name: | Allison Unit 632H | Ground Elevation (ft. MSL): | 6,350’ |
| Surface Hole Location: | 36.998742° N, -107.520669° W | Total Measured Depth (ft.) | 21,326’ |
| Bottom Hole Location: | 37.004077° N, -107.570737° W | County, State: | La Plata County, CO |

*Note: All geographic coordinates on the drilling tech plan and the directional drilling plan refer to NAD 27 geodetic coordinate system. All depths on the drilling tech plan and the directional drilling plan are referenced from an estimated RKB datum of 25’ 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 RKB) | Remarks |
|---|---|---|
| Ojo Alamo | 2,084 | Possible Water |
| Kirtland | 2,150 | Gas & Water |
| Fruitland | 2,581 | Gas & Water |
| Pictured Cliffs | 2,950 | Possible Gas |
| Lewis Shale | 3,467 | None |
| Cliffhouse | 4,900 | Possible Gas & Water |
| Menefee | 5,274 | None |
| Point Lookout | 5,455 | Gas |
| Mancos | 5,974 | Gas |

3. Pressure Control Equipment

A. BOP Equipment

See Appendix A for BOP equipment and choke manifold diagram.

- BOP equipment will be nippled up on top of the wellhead after surface casing is set and cemented.
- Pressure control configurations will be designed to meet the minimum 5M standards.
- All equipment will have 5M pressure rating at a minimum.
- A rotating head will be installed on top of the annular as seen in the attached diagram.

B. BOP Pressure Testing

- For all BOP pressure testing, a BOP test unit with a chart recorder and a BOP test plug will be utilized.
- All tests and inspections will be recorded and logged with time and results.
- A full BOP pressure test will be conducted when initially installed for the first well on the pad or if a seal subject to test pressure is broken, following related repairs, and at a minimum in 30-day intervals.
- A BOPE shell pressure test only will be conducted for subsequent wells on the pad when seals subject to pressure have not been broken, repaired, and fall within the 30-day interval of the first full test.
- The New Mexico Oil & Gas Conservation Division and the BLM will be notified 24 hours in advance of pressure testing BOPE.
- The BOPE will be tested to 250 psi (Low) for 5 minutes and 5,000 psi (High) for 10 minutes.

C. BOP Function Testing

- Annular preventors will be functionally tested at least once per week.
- Pipe and blind rams will be function tested each trip.

D. Casing Pressure Testing

- Surface casing will be pressure tested to 600 psi for 30 minutes.
- Intermediate casing will be pressure tested to 1,500 psi for 30 minutes.

La Plata County, CO Allison Unit 632H

Hilcorp

4. Casing Program

A. Proposed Casing Program:

| Proposed Casing Design | | | | | | | |
|---|---|---|---|---|---|---|---|
| Casing String | Hole Size | Casing (size/weight/grade) | Top Depth (MD/TVD) | Shoe Depth (MD/TVD) | Collapse | Burst | Tensile |
| Surface | 17-1/2" | 13-3/8"-54.5#-J55 (or equiv)-LTC/BTC | 0' | 700'/700' | 1,130 psi | 2,730 psi | 514 klbs |
| Intermediate | 12-1/4" | 9-5/8"-43.5#-L80 (or equiv)-LTC/BTC | 0' | 6,659'/6,193' | 3,810 psi | 6,330 psi | 737 klbs |
| Production | 8-1/2" | 5-1/2"-20.0#-P110 (or equiv)-LTC/BTC | 0' | 21,326'/6,853' | 11,080 psi | 12,360 psi | 548 klbs |

| Proposed Casing Design Safety Factors | | | | |
|---|---|---|---|---|
| Casing String | Burst Design SF | Collapse Design SF | Joint Tensile Design SF | Connection Tensile Design SF |
| Surface | 8.3 | 4.4 | 25.9 | 27.6 |
| Intermediate | 1.7 | 1.2 | 4.3 | 3.5 |
| Production | 3.0 | 3.1 | 1.8 | 1.6 |

B. Casing Design Parameters & Calculations:

- Designed for full wellbore evacuation.
- Mud Weights used for calculations:
  - Surface = 9.0 ppg
  - Intermediate = 11.5 ppg
  - Production = 12.0 ppg
- Minimum Acceptable Safety Factors:
  - Burst: 1.15
  - Collapse: 1.15
  - Tensile: 1.50
- Casing Safety Factor Calculations:

$$Casing\ Burst\ Safety\ Factor = \frac{Casing\ Burst\ Rating(psi)}{Maximum\ Mud\ Weight\ (ppg) \times TVD(ft) \times 0.052}$$

$$Casing\ Collapse\ Safety\ Factor = Hydrostatic\ of\ Mud\ Weight\ in\ Annulus(psi) - \left[TVD\ of\ Casing\ Shoe\ (ft) \times 0.10\frac{psi}{ft}\right]$$

$$Tensile\ Safety\ Factor = \frac{Tensile\ Rating\ of\ Casing\ String\ (lbs)}{Measured\ Depth\ of\ Casing(ft) \times Casing\ Weight\ \frac{lb}{ft} \times DrillingFluid\ Bouyancy\ Factor}$$

*Production Casing Notes:*

- Production casing will be run from surface to TD.
- If the 8-1/2" hole is not drilled to the planned measured depth, casing setting depth will be adjusted accordingly.
- A toe initiation sliding sleeve will be installed at the toe of the production casing.

La Plata County, CO Allison Unit 632H

Hilcorp

5. Proposed Centralizer Program:

| Proposed Centralizer Program | |
|---|---|
| Casing String | Centralizers & Placement |
| Surface Casing | 1 centralizer per joint on bottom 3 joints. |
| Intermediate Casing | 1 centralizer per joint in shoe track.<br>1 centralizer every 3rd joint to surface. |
| Production Casing | Centralizers determined by hole conditions from TD to top of cement. |

6. Proposed Cement Program:

| Proposed Cement Design | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Interval | Depth (ft. MD) | Lead/Tail | Volume ($ft^3$) | Sacks | Excess (%) | Slurry | Density (ppg) | Planned TOC |
| Surface | 700’ | Lead | 973 $ft^3$ | 705 | 100% | Class G Cement<br>Yield: 1.38 $ft^3$/sk | 14.6 | Surface |
| | | Slurry Additives: CaCl (1%), Cello Flake (0.25 lb/sk), CD-2 (0.2%) | | | | | | |
| Intermediate | 6,659’ | Lead | 1,937 $ft^3$ | 378 | 25% | ASTM Type IL<br>Yield: 5.12 $ft^3$/sk | 9.5 | Surface |
| | | Slurry Additives: FL-24 (0.5%), FL-66 (0.5%), IntegraGuard GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), LW-5E (50.0%), R-3 (0.4%), S-8 Silica Flour (35.0%), XCem-311 (0.3%) | | | | | | |
| | | Tail | 649 $ft^3$ | 302 | 25% | ASTM Type IL<br>Yield: 2.15 $ft^3$/sk | 12.5 | 5,000’ |
| | | Slurry Additives: A-10 (5.0%), A-2 (1.0 lb/sk), IntegraSeal PHENO (1.0 lb/sk), IntegraSeal POLI (0.5 lb/sk), R-7C (0.3%), StaticFree (0.01%), XCem-311 (0.3%) | | | | | | |
| Production | 21,326’ | Lead | 517 $ft^3$ | 330 | 25% | ASTM Type IL<br>Yield: 1.57 $ft^3$/sk | 12.0 | 5,000’ |
| | | Slurry Additives: AEXT-1012 (60.0%), FL-66 (0.3%), GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), IntegraSeal Poli (0.25 lb/sk), KCl (3.0%), R-3 (0.55%), STATIC FREE (0.01 lb/sk), XCem-311 (0.3%) | | | | | | |
| | | Tail | 4,113 $ft^3$ | 2,779 | 25% | Class G<br>Yield: 1.48 $ft^3$/sk | 14.0 | 7,000’ |
| | | Slurry Additives: Fly Ash (20.0%), Bentonite (4.0%), FL-66 (0.3%), GW-86 (0.1%), IntegraSeal PHENO (1.0 lb/sk), IntegraSeal POLI (0.25 lb/sk), R-3 (0.25%), StaticFree (0.01 lb/sk) | | | | | | |

*Cement Program Notes:*

- The cement slurry additives may be adjusted to accommodate required pump and compressive test times.
- Actual cement volumes will be determined and may be adjusted onsite based on well conditions.
- For the intermediate hole section, a 2-stage or 3-stage cement job may be performed if hole conditions dictate. If needed, the stage tool will be placed appropriately as conditions indicate.
- 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 nippled 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).

7. Drilling Fluids Program

A. Proposed Drilling Fluids Program:

| Proposed Drilling Fluids Program | | | | | |
|---|---|---|---|---|---|
| Interval | Fluid Type | Density | Fluid Loss | Invert Ratio | Depth |
| | | (ppg) | (mL/30 min) | (%Diesel / %Brine) | (ft. MD) |
| Surface | Water/Gel | 8.3 – 9.2 | NC | N/A | 0' – 700' |
| Intermediate | LSND / Gel | 8.4 – 10.0 | <6 | N/A | 700' – 6,659' |
| Production | Oil Base Mud | 10.0 – 12.0 | 6 – 8 | 70/30 – 75/25 | 6,659' – 21,326' |

*Drilling Fluids Notes:*

- In the 8-1/2" production section, oil base mud will be utilized which will be an invert mud. The base fluid will be diesel. Brine fluid will be $CaCl_2$ or KCl.
- 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 for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 2,106 bbls (11,825 $ft^3$).

8. Estimated Pressures & Drilling Hazards

A. Estimated Pressures

- Estimated Reservoir Pressure of Mancos Shale target: 4,000 – 4,200 psi
- No over-pressured intervals expected (aside from Mancos Shale target).
- There is production from the Fruitland Coal, Mesa Verde and Pictured Cliffs formations in offset wells in the area, which could result in these formations being depleted.

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 intermediate section. Losses will be mitigated by utilizing LCM in the mud system.

D. Hydrogen Sulfide

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

9. Pilot Hole

- No pilot hole is planned for this wellbore.

10. Testing, Logging, Coring

A. Mud Logging

- Mud loggers will collect formation samples every 30'-90' from intermediate casing shoe to TD of the well.

B. MWD

- Measurement while drilling tools will be utilized on all sections of the well to measure and record inclination and azimuth.

C. LWD

- Logging while drilling tools (gamma ray) will be utilized while drilling the production section from the intermediate casing shoe to the production hole section TD to assist in staying in the desired production formation interval while drilling the horizontal section.

D. Open Hole Logging

- None

E. Coring

- None

F. Cased Hole Logging

- The 9-5/8" 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 cement bod log will be run to verify top of cement.

11. Directional Drilling Plan

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

12. Completion

A. Pressure Testing

- A pressure test of the 5-1/2" production casing will be conducted to the maximum anticipated frac pressure for 30 minutes.
- Pressure will be cycled to shift the toe sleeve open.

B. Stimulation

- The well will be stimulated with sand and water. The number of stages and amount of proppant used will be adjusted based on actual lateral length and real-time pumping conditions during the stimulation.
- Individual stages will be perforated on wireline and isolated using frac plugs or dissolvable frac plugs.
- Upon completion of the stimulation operation, frac plugs will be drilled out and the stimulation fluid will be flowed back.

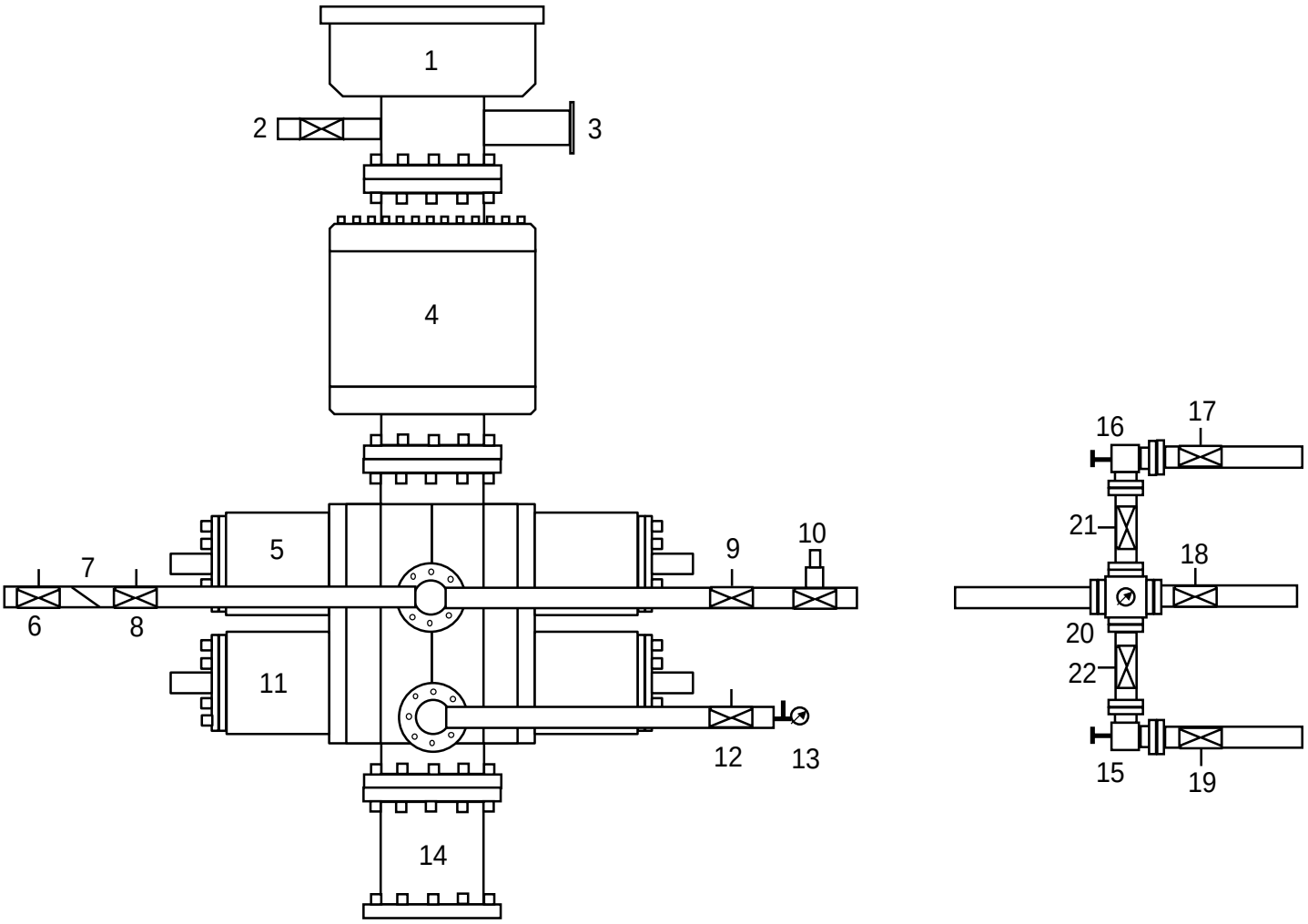
*NOTE: Although this horizontal well may be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 8(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable rules, including 19.15.16.14 A(3) NMAC, 19.15.16.14 8(2) NMAC, 19.15.16.15 8(2)NMAC, and 19.15.16.15 8(4) NMAC.

La Plata County, CO Allison Unit 632H

Hilcorp

# Appendix A

13-5/8" 5M BOP & 5M Choke Manifold Configuration




| | | | |
|---|---|---|---|
| 1 | Rotating Head | 12 | Manual Isolation Valve |
| 2 | Fill-Up Line | 13 | Needle Valve & Pressure Gauge |
| 3 | Flow Line | 14 | Spacer Spool (if needed) |
| 4 | 5M Annular Preventer | 15 | Manual Choke |
| 5 | 5M Pipe Rams | 16 | Hydraulicly Operated 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 | 5M Blind Rams | 22 | Manual Isolation Valve |

Hilcorp Energy Company

Allison Unit 632H
OH
Plan #2

GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29)

| Northing | Easting | Latitude | Longitude |
|---|---|---|---|
| 2182961.61 | 591304.38 | 36.998742 | -107.520669 |

PROJECT DETAILS: San Juan, NM NAD27

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

LONESTAR CONSULTING

Plan: Plan #2 (Allison Unit 632H/OH)

Created By: Janie Collins Date: 10:33, March 28 2025

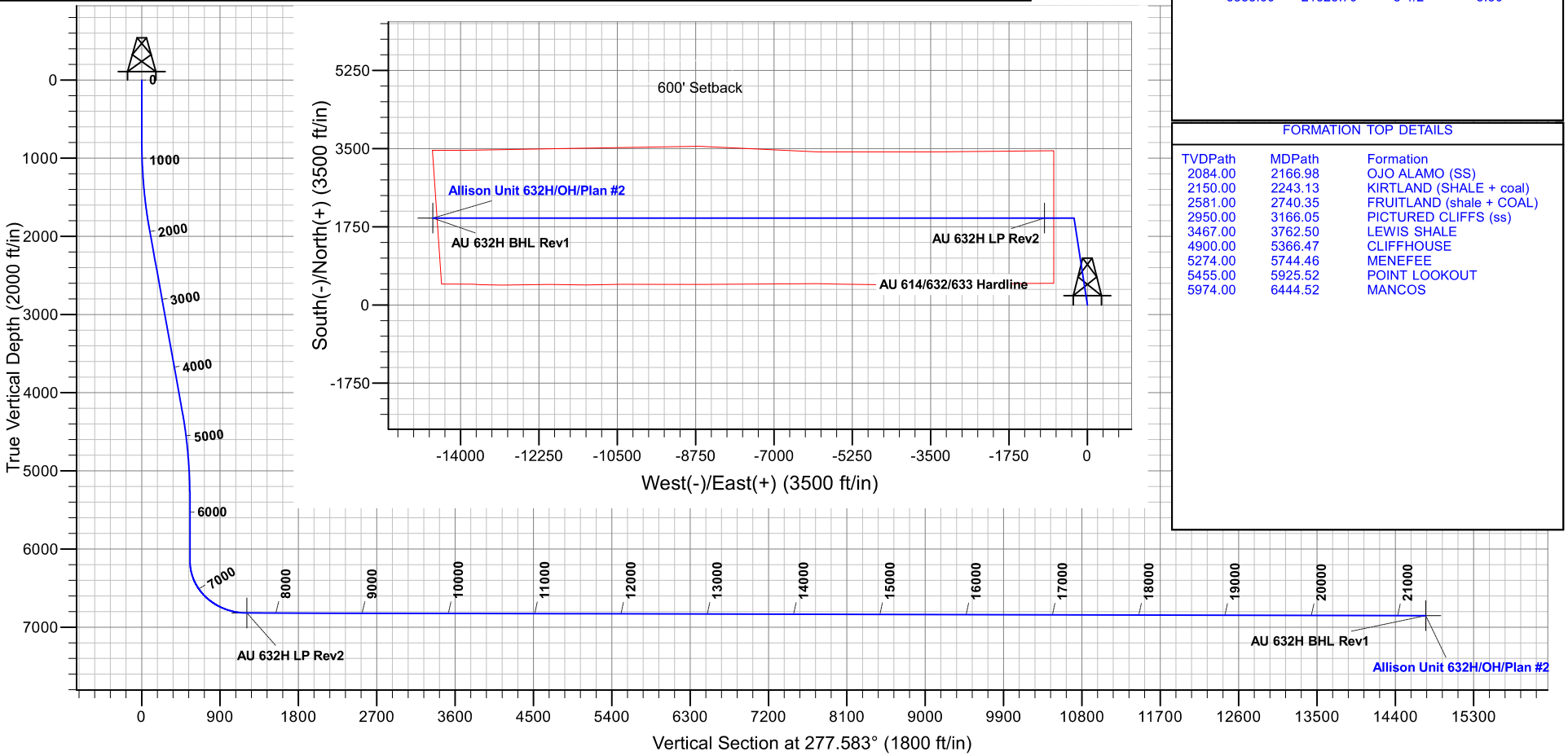
PLAN DETAILS

| MD | Inc | Azi | TVD | +N/-S | +E/-W | Dleg | VSect | Annotation |
|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 750.00 | 0.00 | 0.000 | 750.00 | 0.00 | 0.00 | 0.00 | 0.00 | Start Build 2.50 |
| 1946.42 | 29.91 | 351.244 | 1892.82 | 301.70 | -46.47 | 2.50 | 85.88 | Start 2727.68 hold at 1946.42 MD |
| 4674.10 | 29.91 | 351.244 | 4257.18 | 1646.00 | -253.53 | 0.00 | 468.51 | Start Drop -2.50 |
| 5870.52 | 0.00 | 0.000 | 5400.00 | 1947.70 | -300.00 | 2.50 | 554.39 | Start 757.85 hold at 5870.52 MD |
| 6628.37 | 0.00 | 0.000 | 6157.85 | 1947.70 | -300.00 | 0.00 | 554.39 | Start DLS 8.67 TFO 270.00 |
| 7665.25 | 89.86 | 270.000 | 6819.00 | 1947.70 | -959.49 | 8.67 | 1208.11 | Start DLS 0.00 TFO -77.56 |
| 21325.70 | 89.86 | 269.987 | 6853.00 | 1946.22 | -14619.90 | 0.00 | 14748.87 | TD at 21325.70 |

DESIGN TARGET DETAILS

| Name | TVD | +N/-S | +E/-W | Northing | Easting | Latitude | Longitude |
|---|---|---|---|---|---|---|---|
| AU 632H LP Rev2 | 6819.00 | 1947.70 | -959.49 | 2184906.14 | 590338.50 | 37.004092 | -107.523955 |
| AU 632H BHL Rev1 | 6853.00 | 1946.22 | -14619.90 | 2184859.80 | 576678.20 | 37.004077 | -107.570737 |





Azimuths to True North
Magnetic North: 8.58°

Magnetic Field
Strength: 49353.9nT
Dip Angle: 63.33°
Date: 5/30/2024
Model: HDGM2024

CASING DETAILS

| TVD | MD | Name | Size |
|---|---|---|---|
| 700.00 | 700.00 | 13 3/8" | 13.37 |
| 6200.00 | 6670.55 | 9 5/8" | 9.62 |
| 6853.00 | 21325.70 | 5 1/2" | 5.50 |

FORMATION TOP DETAILS

| TVDPath | MDPath | Formation |
|---|---|---|
| 2084.00 | 2166.98 | OJO ALAMO (SS) |
| 2150.00 | 2243.13 | KIRTLAND (SHALE + coal) |
| 2581.00 | 2740.35 | FRUITLAND (shale + COAL) |
| 2950.00 | 3166.05 | PICTURED CLIFFS (ss) |
| 3467.00 | 3762.50 | LEWIS SHALE |
| 4900.00 | 5366.47 | CLIFFHOUSE |
| 5274.00 | 5744.46 | MENEFEE |
| 5455.00 | 5925.52 | POINT LOOKOUT |
| 5974.00 | 6444.52 | MANCOS |

# Hilcorp Energy - San Juan Basin

**San Juan, NM NAD27**
**Allison Unit 611H Pad**
**Allison Unit 632H - Slot 05**

**OH**

**Plan: Plan #2**

# Standard Planning Report

**28 March, 2025**

# Lonestar Consulting, LLC

Planning Report

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

| **Project** | San Juan, NM NAD27 | | |
|---|---|---|---|
| **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 | | |

| **Site** | Allison Unit 611H Pad | | | | |
|---|---|---|---|---|---|
| **Site Position:** | | **Northing:** | 2,182,981.63 usft | **Latitude:** | 36.998797 |
| **From:** | Lat/Long | **Easting:** | 591,305.19 usft | **Longitude:** | -107.520666 |
| **Position Uncertainty:** | 0.00 ft | **Slot Radius:** | 13.20 in | | |

| **Well** | Allison Unit 632H - Slot 05 | | | | | |
|---|---|---|---|---|---|---|
| **Well Position** | **+N/-S** | 0.00 ft | **Northing:** | 2,182,961.60 usft | **Latitude:** | 36.998742 |
| | **+E/-W** | 0.00 ft | **Easting:** | 591,304.38 usft | **Longitude:** | -107.520669 |
| **Position Uncertainty** | | 0.00 ft | **Wellhead Elevation:** | ft | **Ground Level:** | 6,350.00 ft |
| **Grid Convergence:** | | 0.19 ° | | | | |

| **Wellbore** | OH | | | | |
|---|---|---|---|---|---|
| **Magnetics** | **Model Name** | **Sample Date** | **Declination (°)** | **Dip Angle (°)** | **Field Strength (nT)** |
| | HDGM2024 | 5/30/2024 | 8.58 | 63.33 | 49,353.90000000 |

| **Design** | Plan #2 | | | | |
|---|---|---|---|---|---|
| **Audit Notes:** | | | | | |
| **Version:** | | **Phase:** | PLAN | **Tie On Depth:** | 0.00 |
| **Vertical Section:** | **Depth From (TVD) (ft)** | **+N/-S (ft)** | **+E/-W (ft)** | **Direction (°)** | |
| | 0.00 | 0.00 | 0.00 | 277.583 | |

**Plan Survey Tool Program** **Date** 3/26/2025

| | Depth From (ft) | Depth To (ft) | Survey (Wellbore) | Tool Name | Remarks |
|---|---|---|---|---|---|
| 1 | 0.00 | 21,325.70 | Plan #2 (OH) | MWD+HDGM | |
| | | | | OWSG MWD + HDGM | |

Hilcorp Energy Company

# Lonestar Consulting, LLC

Planning Report

LONESTAR CONSULTING

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Plan Sections**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) | TFO (°) | Target |
|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 750.00 | 0.00 | 0.000 | 750.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1,946.42 | 29.91 | 351.244 | 1,892.82 | 301.70 | -46.47 | 2.50 | 2.50 | 0.00 | 351.24 | |
| 4,674.10 | 29.91 | 351.244 | 4,257.18 | 1,646.00 | -253.53 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 5,870.52 | 0.00 | 0.000 | 5,400.00 | 1,947.70 | -300.00 | 2.50 | -2.50 | 0.00 | 180.00 | |
| 6,628.38 | 0.00 | 0.000 | 6,157.85 | 1,947.70 | -300.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 7,665.25 | 89.86 | 270.000 | 6,819.00 | 1,947.70 | -959.49 | 8.67 | 8.67 | -8.68 | 270.00 | AU 632H LP Rev2 |
| 21,325.70 | 89.86 | 269.987 | 6,853.00 | 1,946.22 | -14,619.90 | 0.00 | 0.00 | 0.00 | -77.56 | AU 632H BHL Rev1 |

# Lonestar Consulting, LLC

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.00 | 0.00 | 0.000 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 200.00 | 0.00 | 0.000 | 200.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 300.00 | 0.00 | 0.000 | 300.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 400.00 | 0.00 | 0.000 | 400.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 500.00 | 0.00 | 0.000 | 500.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 600.00 | 0.00 | 0.000 | 600.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 700.00 | 0.00 | 0.000 | 700.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 750.00 | 0.00 | 0.000 | 750.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 800.00 | 1.25 | 351.244 | 800.00 | 0.54 | -0.08 | 0.15 | 2.50 | 2.50 | 0.00 |
| 900.00 | 3.75 | 351.244 | 899.89 | 4.85 | -0.75 | 1.38 | 2.50 | 2.50 | 0.00 |
| 1,000.00 | 6.25 | 351.244 | 999.50 | 13.46 | -2.07 | 3.83 | 2.50 | 2.50 | 0.00 |
| 1,100.00 | 8.75 | 351.244 | 1,098.64 | 26.36 | -4.06 | 7.50 | 2.50 | 2.50 | 0.00 |
| 1,200.00 | 11.25 | 351.244 | 1,197.11 | 43.52 | -6.70 | 12.39 | 2.50 | 2.50 | 0.00 |
| 1,300.00 | 13.75 | 351.244 | 1,294.74 | 64.91 | -10.00 | 18.48 | 2.50 | 2.50 | 0.00 |
| 1,400.00 | 16.25 | 351.244 | 1,391.32 | 90.49 | -13.94 | 25.76 | 2.50 | 2.50 | 0.00 |
| 1,500.00 | 18.75 | 351.244 | 1,486.69 | 120.21 | -18.52 | 34.22 | 2.50 | 2.50 | 0.00 |
| 1,600.00 | 21.25 | 351.244 | 1,580.65 | 154.01 | -23.72 | 43.84 | 2.50 | 2.50 | 0.00 |
| 1,700.00 | 23.75 | 351.244 | 1,673.03 | 191.83 | -29.55 | 54.60 | 2.50 | 2.50 | 0.00 |
| 1,800.00 | 26.25 | 351.244 | 1,763.65 | 233.60 | -35.98 | 66.49 | 2.50 | 2.50 | 0.00 |
| 1,900.00 | 28.75 | 351.244 | 1,852.35 | 279.23 | -43.01 | 79.48 | 2.50 | 2.50 | 0.00 |
| 1,946.42 | 29.91 | 351.244 | 1,892.82 | 301.70 | -46.47 | 85.88 | 2.50 | 2.50 | 0.00 |
| 2,000.00 | 29.91 | 351.244 | 1,939.26 | 328.11 | -50.54 | 93.39 | 0.00 | 0.00 | 0.00 |
| 2,100.00 | 29.91 | 351.244 | 2,025.94 | 377.39 | -58.13 | 107.42 | 0.00 | 0.00 | 0.00 |
| 2,200.00 | 29.91 | 351.244 | 2,112.62 | 426.67 | -65.72 | 121.45 | 0.00 | 0.00 | 0.00 |
| 2,300.00 | 29.91 | 351.244 | 2,199.30 | 475.96 | -73.31 | 135.48 | 0.00 | 0.00 | 0.00 |
| 2,400.00 | 29.91 | 351.244 | 2,285.98 | 525.24 | -80.90 | 149.50 | 0.00 | 0.00 | 0.00 |
| 2,500.00 | 29.91 | 351.244 | 2,372.66 | 574.52 | -88.49 | 163.53 | 0.00 | 0.00 | 0.00 |
| 2,600.00 | 29.91 | 351.244 | 2,459.34 | 623.81 | -96.08 | 177.56 | 0.00 | 0.00 | 0.00 |
| 2,700.00 | 29.91 | 351.244 | 2,546.02 | 673.09 | -103.67 | 191.59 | 0.00 | 0.00 | 0.00 |
| 2,800.00 | 29.91 | 351.244 | 2,632.70 | 722.37 | -111.27 | 205.62 | 0.00 | 0.00 | 0.00 |
| 2,900.00 | 29.91 | 351.244 | 2,719.38 | 771.66 | -118.86 | 219.64 | 0.00 | 0.00 | 0.00 |
| 3,000.00 | 29.91 | 351.244 | 2,806.06 | 820.94 | -126.45 | 233.67 | 0.00 | 0.00 | 0.00 |
| 3,100.00 | 29.91 | 351.244 | 2,892.74 | 870.23 | -134.04 | 247.70 | 0.00 | 0.00 | 0.00 |
| 3,200.00 | 29.91 | 351.244 | 2,979.42 | 919.51 | -141.63 | 261.73 | 0.00 | 0.00 | 0.00 |
| 3,300.00 | 29.91 | 351.244 | 3,066.10 | 968.79 | -149.22 | 275.76 | 0.00 | 0.00 | 0.00 |
| 3,400.00 | 29.91 | 351.244 | 3,152.79 | 1,018.08 | -156.81 | 289.78 | 0.00 | 0.00 | 0.00 |
| 3,500.00 | 29.91 | 351.244 | 3,239.47 | 1,067.36 | -164.40 | 303.81 | 0.00 | 0.00 | 0.00 |
| 3,600.00 | 29.91 | 351.244 | 3,326.15 | 1,116.64 | -171.99 | 317.84 | 0.00 | 0.00 | 0.00 |
| 3,700.00 | 29.91 | 351.244 | 3,412.83 | 1,165.93 | -179.59 | 331.87 | 0.00 | 0.00 | 0.00 |
| 3,800.00 | 29.91 | 351.244 | 3,499.51 | 1,215.21 | -187.18 | 345.90 | 0.00 | 0.00 | 0.00 |
| 3,900.00 | 29.91 | 351.244 | 3,586.19 | 1,264.49 | -194.77 | 359.92 | 0.00 | 0.00 | 0.00 |
| 4,000.00 | 29.91 | 351.244 | 3,672.87 | 1,313.78 | -202.36 | 373.95 | 0.00 | 0.00 | 0.00 |
| 4,100.00 | 29.91 | 351.244 | 3,759.55 | 1,363.06 | -209.95 | 387.98 | 0.00 | 0.00 | 0.00 |
| 4,200.00 | 29.91 | 351.244 | 3,846.23 | 1,412.34 | -217.54 | 402.01 | 0.00 | 0.00 | 0.00 |
| 4,300.00 | 29.91 | 351.244 | 3,932.91 | 1,461.63 | -225.13 | 416.04 | 0.00 | 0.00 | 0.00 |
| 4,400.00 | 29.91 | 351.244 | 4,019.59 | 1,510.91 | -232.72 | 430.06 | 0.00 | 0.00 | 0.00 |
| 4,500.00 | 29.91 | 351.244 | 4,106.27 | 1,560.19 | -240.31 | 444.09 | 0.00 | 0.00 | 0.00 |
| 4,600.00 | 29.91 | 351.244 | 4,192.95 | 1,609.48 | -247.90 | 458.12 | 0.00 | 0.00 | 0.00 |
| 4,674.10 | 29.91 | 351.244 | 4,257.18 | 1,646.00 | -253.53 | 468.51 | 0.00 | 0.00 | 0.00 |
| 4,700.00 | 29.26 | 351.244 | 4,279.70 | 1,658.64 | -255.48 | 472.11 | 2.50 | -2.50 | 0.00 |
| 4,800.00 | 26.76 | 351.244 | 4,367.98 | 1,705.05 | -262.63 | 485.32 | 2.50 | -2.50 | 0.00 |

# Lonestar Consulting, LLC

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 4,900.00 | 24.26 | 351.244 | 4,458.22 | 1,747.62 | -269.18 | 497.44 | 2.50 | -2.50 | 0.00 |
| 5,000.00 | 21.76 | 351.244 | 4,550.26 | 1,786.25 | -275.13 | 508.44 | 2.50 | -2.50 | 0.00 |
| 5,100.00 | 19.26 | 351.244 | 4,643.91 | 1,820.88 | -280.47 | 518.29 | 2.50 | -2.50 | 0.00 |
| 5,200.00 | 16.76 | 351.244 | 4,739.00 | 1,851.44 | -285.17 | 526.99 | 2.50 | -2.50 | 0.00 |
| 5,300.00 | 14.26 | 351.244 | 4,835.35 | 1,877.88 | -289.25 | 534.52 | 2.50 | -2.50 | 0.00 |
| 5,400.00 | 11.76 | 351.244 | 4,932.77 | 1,900.13 | -292.67 | 540.85 | 2.50 | -2.50 | 0.00 |
| 5,500.00 | 9.26 | 351.244 | 5,031.09 | 1,918.16 | -295.45 | 545.98 | 2.50 | -2.50 | 0.00 |
| 5,600.00 | 6.76 | 351.244 | 5,130.10 | 1,931.94 | -297.57 | 549.90 | 2.50 | -2.50 | 0.00 |
| 5,700.00 | 4.26 | 351.244 | 5,229.63 | 1,941.43 | -299.03 | 552.61 | 2.50 | -2.50 | 0.00 |
| 5,800.00 | 1.76 | 351.244 | 5,329.49 | 1,946.63 | -299.83 | 554.09 | 2.50 | -2.50 | 0.00 |
| 5,870.52 | 0.00 | 0.000 | 5,400.00 | 1,947.70 | -300.00 | 554.39 | 2.50 | -2.50 | 0.00 |
| 5,900.00 | 0.00 | 0.000 | 5,429.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,000.00 | 0.00 | 0.000 | 5,529.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,100.00 | 0.00 | 0.000 | 5,629.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,200.00 | 0.00 | 0.000 | 5,729.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,300.00 | 0.00 | 0.000 | 5,829.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,400.00 | 0.00 | 0.000 | 5,929.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,500.00 | 0.00 | 0.000 | 6,029.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,600.00 | 0.00 | 0.000 | 6,129.48 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,628.38 | 0.00 | 0.000 | 6,157.85 | 1,947.70 | -300.00 | 554.39 | 0.00 | 0.00 | 0.00 |
| 6,700.00 | 6.21 | 270.000 | 6,229.34 | 1,947.70 | -303.88 | 558.23 | 8.67 | 8.67 | 0.00 |
| 6,800.00 | 14.87 | 270.000 | 6,327.55 | 1,947.70 | -322.15 | 576.35 | 8.67 | 8.67 | 0.00 |
| 6,900.00 | 23.54 | 270.000 | 6,421.90 | 1,947.70 | -355.02 | 608.93 | 8.67 | 8.67 | 0.00 |
| 7,000.00 | 32.21 | 270.000 | 6,510.21 | 1,947.70 | -401.72 | 655.22 | 8.67 | 8.67 | 0.00 |
| 7,100.00 | 40.87 | 270.000 | 6,590.48 | 1,947.70 | -461.20 | 714.18 | 8.67 | 8.67 | 0.00 |
| 7,200.00 | 49.54 | 270.000 | 6,660.87 | 1,947.70 | -532.10 | 784.46 | 8.67 | 8.67 | 0.00 |
| 7,300.00 | 58.20 | 270.000 | 6,719.78 | 1,947.70 | -612.79 | 864.44 | 8.67 | 8.67 | 0.00 |
| 7,400.00 | 66.87 | 270.000 | 6,765.85 | 1,947.70 | -701.43 | 952.31 | 8.67 | 8.67 | 0.00 |
| 7,500.00 | 75.54 | 270.000 | 6,798.05 | 1,947.70 | -796.01 | 1,046.06 | 8.67 | 8.67 | 0.00 |
| 7,600.00 | 84.20 | 270.000 | 6,815.62 | 1,947.70 | -894.36 | 1,143.55 | 8.67 | 8.67 | 0.00 |
| 7,665.25 | 89.86 | 270.000 | 6,819.00 | 1,947.70 | -959.49 | 1,208.11 | 8.67 | 8.67 | 0.00 |
| 7,700.00 | 89.86 | 270.000 | 6,819.09 | 1,947.70 | -994.24 | 1,242.56 | 0.00 | 0.00 | 0.00 |
| 7,800.00 | 89.86 | 270.000 | 6,819.34 | 1,947.70 | -1,094.24 | 1,341.69 | 0.00 | 0.00 | 0.00 |
| 7,900.00 | 89.86 | 270.000 | 6,819.59 | 1,947.70 | -1,194.24 | 1,440.81 | 0.00 | 0.00 | 0.00 |
| 8,000.00 | 89.86 | 270.000 | 6,819.84 | 1,947.70 | -1,294.24 | 1,539.94 | 0.00 | 0.00 | 0.00 |
| 8,100.00 | 89.86 | 270.000 | 6,820.09 | 1,947.70 | -1,394.24 | 1,639.06 | 0.00 | 0.00 | 0.00 |
| 8,200.00 | 89.86 | 270.000 | 6,820.34 | 1,947.70 | -1,494.24 | 1,738.19 | 0.00 | 0.00 | 0.00 |
| 8,300.00 | 89.86 | 270.000 | 6,820.60 | 1,947.70 | -1,594.24 | 1,837.31 | 0.00 | 0.00 | 0.00 |
| 8,400.00 | 89.86 | 270.000 | 6,820.85 | 1,947.70 | -1,694.24 | 1,936.44 | 0.00 | 0.00 | 0.00 |
| 8,500.00 | 89.86 | 269.999 | 6,821.10 | 1,947.70 | -1,794.24 | 2,035.56 | 0.00 | 0.00 | 0.00 |
| 8,600.00 | 89.86 | 269.999 | 6,821.35 | 1,947.70 | -1,894.24 | 2,134.69 | 0.00 | 0.00 | 0.00 |
| 8,700.00 | 89.86 | 269.999 | 6,821.60 | 1,947.70 | -1,994.24 | 2,233.81 | 0.00 | 0.00 | 0.00 |
| 8,800.00 | 89.86 | 269.999 | 6,821.85 | 1,947.70 | -2,094.24 | 2,332.94 | 0.00 | 0.00 | 0.00 |
| 8,900.00 | 89.86 | 269.999 | 6,822.10 | 1,947.70 | -2,194.24 | 2,432.06 | 0.00 | 0.00 | 0.00 |
| 9,000.00 | 89.86 | 269.999 | 6,822.35 | 1,947.70 | -2,294.24 | 2,531.19 | 0.00 | 0.00 | 0.00 |
| 9,100.00 | 89.86 | 269.999 | 6,822.60 | 1,947.69 | -2,394.24 | 2,630.31 | 0.00 | 0.00 | 0.00 |
| 9,200.00 | 89.86 | 269.999 | 6,822.85 | 1,947.69 | -2,494.24 | 2,729.44 | 0.00 | 0.00 | 0.00 |
| 9,300.00 | 89.86 | 269.999 | 6,823.10 | 1,947.69 | -2,594.24 | 2,828.56 | 0.00 | 0.00 | 0.00 |
| 9,400.00 | 89.86 | 269.999 | 6,823.36 | 1,947.69 | -2,694.24 | 2,927.69 | 0.00 | 0.00 | 0.00 |
| 9,500.00 | 89.86 | 269.999 | 6,823.61 | 1,947.68 | -2,794.24 | 3,026.81 | 0.00 | 0.00 | 0.00 |
| 9,600.00 | 89.86 | 269.998 | 6,823.86 | 1,947.68 | -2,894.24 | 3,125.94 | 0.00 | 0.00 | 0.00 |
| 9,700.00 | 89.86 | 269.998 | 6,824.11 | 1,947.68 | -2,994.24 | 3,225.06 | 0.00 | 0.00 | 0.00 |

# Lonestar Consulting, LLC

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 9,800.00 | 89.86 | 269.998 | 6,824.36 | 1,947.68 | -3,094.24 | 3,324.19 | 0.00 | 0.00 | 0.00 |
| 9,900.00 | 89.86 | 269.998 | 6,824.61 | 1,947.67 | -3,194.23 | 3,423.31 | 0.00 | 0.00 | 0.00 |
| 10,000.00 | 89.86 | 269.998 | 6,824.86 | 1,947.67 | -3,294.23 | 3,522.44 | 0.00 | 0.00 | 0.00 |
| 10,100.00 | 89.86 | 269.998 | 6,825.11 | 1,947.67 | -3,394.23 | 3,621.56 | 0.00 | 0.00 | 0.00 |
| 10,200.00 | 89.86 | 269.998 | 6,825.36 | 1,947.66 | -3,494.23 | 3,720.69 | 0.00 | 0.00 | 0.00 |
| 10,300.00 | 89.86 | 269.998 | 6,825.61 | 1,947.66 | -3,594.23 | 3,819.81 | 0.00 | 0.00 | 0.00 |
| 10,400.00 | 89.86 | 269.998 | 6,825.86 | 1,947.66 | -3,694.23 | 3,918.94 | 0.00 | 0.00 | 0.00 |
| 10,500.00 | 89.86 | 269.998 | 6,826.11 | 1,947.65 | -3,794.23 | 4,018.06 | 0.00 | 0.00 | 0.00 |
| 10,600.00 | 89.86 | 269.997 | 6,826.36 | 1,947.65 | -3,894.23 | 4,117.19 | 0.00 | 0.00 | 0.00 |
| 10,700.00 | 89.86 | 269.997 | 6,826.61 | 1,947.64 | -3,994.23 | 4,216.31 | 0.00 | 0.00 | 0.00 |
| 10,800.00 | 89.86 | 269.997 | 6,826.86 | 1,947.64 | -4,094.23 | 4,315.44 | 0.00 | 0.00 | 0.00 |
| 10,900.00 | 89.86 | 269.997 | 6,827.11 | 1,947.63 | -4,194.23 | 4,414.56 | 0.00 | 0.00 | 0.00 |
| 11,000.00 | 89.86 | 269.997 | 6,827.36 | 1,947.63 | -4,294.23 | 4,513.68 | 0.00 | 0.00 | 0.00 |
| 11,100.00 | 89.86 | 269.997 | 6,827.61 | 1,947.62 | -4,394.23 | 4,612.81 | 0.00 | 0.00 | 0.00 |
| 11,200.00 | 89.86 | 269.997 | 6,827.86 | 1,947.62 | -4,494.23 | 4,711.93 | 0.00 | 0.00 | 0.00 |
| 11,300.00 | 89.86 | 269.997 | 6,828.11 | 1,947.61 | -4,594.23 | 4,811.06 | 0.00 | 0.00 | 0.00 |
| 11,400.00 | 89.86 | 269.997 | 6,828.36 | 1,947.61 | -4,694.23 | 4,910.18 | 0.00 | 0.00 | 0.00 |
| 11,500.00 | 89.86 | 269.997 | 6,828.61 | 1,947.60 | -4,794.23 | 5,009.31 | 0.00 | 0.00 | 0.00 |
| 11,600.00 | 89.86 | 269.997 | 6,828.86 | 1,947.59 | -4,894.23 | 5,108.43 | 0.00 | 0.00 | 0.00 |
| 11,700.00 | 89.86 | 269.996 | 6,829.11 | 1,947.59 | -4,994.23 | 5,207.56 | 0.00 | 0.00 | 0.00 |
| 11,800.00 | 89.86 | 269.996 | 6,829.36 | 1,947.58 | -5,094.23 | 5,306.68 | 0.00 | 0.00 | 0.00 |
| 11,900.00 | 89.86 | 269.996 | 6,829.61 | 1,947.58 | -5,194.23 | 5,405.80 | 0.00 | 0.00 | 0.00 |
| 12,000.00 | 89.86 | 269.996 | 6,829.86 | 1,947.57 | -5,294.23 | 5,504.93 | 0.00 | 0.00 | 0.00 |
| 12,100.00 | 89.86 | 269.996 | 6,830.11 | 1,947.56 | -5,394.23 | 5,604.05 | 0.00 | 0.00 | 0.00 |
| 12,200.00 | 89.86 | 269.996 | 6,830.36 | 1,947.56 | -5,494.23 | 5,703.18 | 0.00 | 0.00 | 0.00 |
| 12,300.00 | 89.86 | 269.996 | 6,830.61 | 1,947.55 | -5,594.23 | 5,802.30 | 0.00 | 0.00 | 0.00 |
| 12,400.00 | 89.86 | 269.996 | 6,830.86 | 1,947.54 | -5,694.23 | 5,901.43 | 0.00 | 0.00 | 0.00 |
| 12,500.00 | 89.86 | 269.996 | 6,831.11 | 1,947.53 | -5,794.23 | 6,000.55 | 0.00 | 0.00 | 0.00 |
| 12,600.00 | 89.86 | 269.996 | 6,831.36 | 1,947.53 | -5,894.23 | 6,099.67 | 0.00 | 0.00 | 0.00 |
| 12,700.00 | 89.86 | 269.995 | 6,831.61 | 1,947.52 | -5,994.23 | 6,198.80 | 0.00 | 0.00 | 0.00 |
| 12,800.00 | 89.86 | 269.995 | 6,831.86 | 1,947.51 | -6,094.23 | 6,297.92 | 0.00 | 0.00 | 0.00 |
| 12,900.00 | 89.86 | 269.995 | 6,832.11 | 1,947.50 | -6,194.23 | 6,397.05 | 0.00 | 0.00 | 0.00 |
| 13,000.00 | 89.86 | 269.995 | 6,832.36 | 1,947.49 | -6,294.23 | 6,496.17 | 0.00 | 0.00 | 0.00 |
| 13,100.00 | 89.86 | 269.995 | 6,832.61 | 1,947.49 | -6,394.23 | 6,595.30 | 0.00 | 0.00 | 0.00 |
| 13,200.00 | 89.86 | 269.995 | 6,832.86 | 1,947.48 | -6,494.22 | 6,694.42 | 0.00 | 0.00 | 0.00 |
| 13,300.00 | 89.86 | 269.995 | 6,833.11 | 1,947.47 | -6,594.22 | 6,793.54 | 0.00 | 0.00 | 0.00 |
| 13,400.00 | 89.86 | 269.995 | 6,833.36 | 1,947.46 | -6,694.22 | 6,892.67 | 0.00 | 0.00 | 0.00 |
| 13,500.00 | 89.86 | 269.995 | 6,833.61 | 1,947.45 | -6,794.22 | 6,991.79 | 0.00 | 0.00 | 0.00 |
| 13,600.00 | 89.86 | 269.995 | 6,833.86 | 1,947.44 | -6,894.22 | 7,090.92 | 0.00 | 0.00 | 0.00 |
| 13,700.00 | 89.86 | 269.995 | 6,834.10 | 1,947.43 | -6,994.22 | 7,190.04 | 0.00 | 0.00 | 0.00 |
| 13,800.00 | 89.86 | 269.994 | 6,834.35 | 1,947.42 | -7,094.22 | 7,289.16 | 0.00 | 0.00 | 0.00 |
| 13,900.00 | 89.86 | 269.994 | 6,834.60 | 1,947.41 | -7,194.22 | 7,388.29 | 0.00 | 0.00 | 0.00 |
| 14,000.00 | 89.86 | 269.994 | 6,834.85 | 1,947.40 | -7,294.22 | 7,487.41 | 0.00 | 0.00 | 0.00 |
| 14,100.00 | 89.86 | 269.994 | 6,835.10 | 1,947.39 | -7,394.22 | 7,586.54 | 0.00 | 0.00 | 0.00 |
| 14,200.00 | 89.86 | 269.994 | 6,835.35 | 1,947.38 | -7,494.22 | 7,685.66 | 0.00 | 0.00 | 0.00 |
| 14,300.00 | 89.86 | 269.994 | 6,835.60 | 1,947.37 | -7,594.22 | 7,784.78 | 0.00 | 0.00 | 0.00 |
| 14,400.00 | 89.86 | 269.994 | 6,835.85 | 1,947.36 | -7,694.22 | 7,883.91 | 0.00 | 0.00 | 0.00 |
| 14,500.00 | 89.86 | 269.994 | 6,836.10 | 1,947.35 | -7,794.22 | 7,983.03 | 0.00 | 0.00 | 0.00 |
| 14,600.00 | 89.86 | 269.994 | 6,836.35 | 1,947.34 | -7,894.22 | 8,082.15 | 0.00 | 0.00 | 0.00 |
| 14,700.00 | 89.86 | 269.994 | 6,836.59 | 1,947.33 | -7,994.22 | 8,181.28 | 0.00 | 0.00 | 0.00 |
| 14,800.00 | 89.86 | 269.993 | 6,836.84 | 1,947.32 | -8,094.22 | 8,280.40 | 0.00 | 0.00 | 0.00 |
| 14,900.00 | 89.86 | 269.993 | 6,837.09 | 1,947.31 | -8,194.22 | 8,379.53 | 0.00 | 0.00 | 0.00 |

# Lonestar Consulting, LLC

## Planning Report

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 15,000.00 | 89.86 | 269.993 | 6,837.34 | 1,947.29 | -8,294.22 | 8,478.65 | 0.00 | 0.00 | 0.00 |
| 15,100.00 | 89.86 | 269.993 | 6,837.59 | 1,947.28 | -8,394.22 | 8,577.77 | 0.00 | 0.00 | 0.00 |
| 15,200.00 | 89.86 | 269.993 | 6,837.84 | 1,947.27 | -8,494.22 | 8,676.90 | 0.00 | 0.00 | 0.00 |
| 15,300.00 | 89.86 | 269.993 | 6,838.09 | 1,947.26 | -8,594.22 | 8,776.02 | 0.00 | 0.00 | 0.00 |
| 15,400.00 | 89.86 | 269.993 | 6,838.34 | 1,947.25 | -8,694.22 | 8,875.14 | 0.00 | 0.00 | 0.00 |
| 15,500.00 | 89.86 | 269.993 | 6,838.58 | 1,947.23 | -8,794.22 | 8,974.27 | 0.00 | 0.00 | 0.00 |
| 15,600.00 | 89.86 | 269.993 | 6,838.83 | 1,947.22 | -8,894.22 | 9,073.39 | 0.00 | 0.00 | 0.00 |
| 15,700.00 | 89.86 | 269.993 | 6,839.08 | 1,947.21 | -8,994.22 | 9,172.51 | 0.00 | 0.00 | 0.00 |
| 15,800.00 | 89.86 | 269.993 | 6,839.33 | 1,947.20 | -9,094.22 | 9,271.64 | 0.00 | 0.00 | 0.00 |
| 15,900.00 | 89.86 | 269.992 | 6,839.58 | 1,947.18 | -9,194.22 | 9,370.76 | 0.00 | 0.00 | 0.00 |
| 16,000.00 | 89.86 | 269.992 | 6,839.83 | 1,947.17 | -9,294.22 | 9,469.89 | 0.00 | 0.00 | 0.00 |
| 16,100.00 | 89.86 | 269.992 | 6,840.07 | 1,947.16 | -9,394.22 | 9,569.01 | 0.00 | 0.00 | 0.00 |
| 16,200.00 | 89.86 | 269.992 | 6,840.32 | 1,947.14 | -9,494.22 | 9,668.13 | 0.00 | 0.00 | 0.00 |
| 16,300.00 | 89.86 | 269.992 | 6,840.57 | 1,947.13 | -9,594.22 | 9,767.26 | 0.00 | 0.00 | 0.00 |
| 16,400.00 | 89.86 | 269.992 | 6,840.82 | 1,947.11 | -9,694.21 | 9,866.38 | 0.00 | 0.00 | 0.00 |
| 16,500.00 | 89.86 | 269.992 | 6,841.07 | 1,947.10 | -9,794.21 | 9,965.50 | 0.00 | 0.00 | 0.00 |
| 16,600.00 | 89.86 | 269.992 | 6,841.32 | 1,947.09 | -9,894.21 | 10,064.63 | 0.00 | 0.00 | 0.00 |
| 16,700.00 | 89.86 | 269.992 | 6,841.56 | 1,947.07 | -9,994.21 | 10,163.75 | 0.00 | 0.00 | 0.00 |
| 16,800.00 | 89.86 | 269.992 | 6,841.81 | 1,947.06 | -10,094.21 | 10,262.87 | 0.00 | 0.00 | 0.00 |
| 16,900.00 | 89.86 | 269.991 | 6,842.06 | 1,947.04 | -10,194.21 | 10,362.00 | 0.00 | 0.00 | 0.00 |
| 17,000.00 | 89.86 | 269.991 | 6,842.31 | 1,947.03 | -10,294.21 | 10,461.12 | 0.00 | 0.00 | 0.00 |
| 17,100.00 | 89.86 | 269.991 | 6,842.56 | 1,947.01 | -10,394.21 | 10,560.24 | 0.00 | 0.00 | 0.00 |
| 17,200.00 | 89.86 | 269.991 | 6,842.80 | 1,947.00 | -10,494.21 | 10,659.37 | 0.00 | 0.00 | 0.00 |
| 17,300.00 | 89.86 | 269.991 | 6,843.05 | 1,946.98 | -10,594.21 | 10,758.49 | 0.00 | 0.00 | 0.00 |
| 17,400.00 | 89.86 | 269.991 | 6,843.30 | 1,946.97 | -10,694.21 | 10,857.61 | 0.00 | 0.00 | 0.00 |
| 17,500.00 | 89.86 | 269.991 | 6,843.55 | 1,946.95 | -10,794.21 | 10,956.73 | 0.00 | 0.00 | 0.00 |
| 17,600.00 | 89.86 | 269.991 | 6,843.79 | 1,946.93 | -10,894.21 | 11,055.86 | 0.00 | 0.00 | 0.00 |
| 17,700.00 | 89.86 | 269.991 | 6,844.04 | 1,946.92 | -10,994.21 | 11,154.98 | 0.00 | 0.00 | 0.00 |
| 17,800.00 | 89.86 | 269.991 | 6,844.29 | 1,946.90 | -11,094.21 | 11,254.10 | 0.00 | 0.00 | 0.00 |
| 17,900.00 | 89.86 | 269.991 | 6,844.54 | 1,946.89 | -11,194.21 | 11,353.23 | 0.00 | 0.00 | 0.00 |
| 18,000.00 | 89.86 | 269.990 | 6,844.79 | 1,946.87 | -11,294.21 | 11,452.35 | 0.00 | 0.00 | 0.00 |
| 18,100.00 | 89.86 | 269.990 | 6,845.03 | 1,946.85 | -11,394.21 | 11,551.47 | 0.00 | 0.00 | 0.00 |
| 18,200.00 | 89.86 | 269.990 | 6,845.28 | 1,946.84 | -11,494.21 | 11,650.60 | 0.00 | 0.00 | 0.00 |
| 18,300.00 | 89.86 | 269.990 | 6,845.53 | 1,946.82 | -11,594.21 | 11,749.72 | 0.00 | 0.00 | 0.00 |
| 18,400.00 | 89.86 | 269.990 | 6,845.78 | 1,946.80 | -11,694.21 | 11,848.84 | 0.00 | 0.00 | 0.00 |
| 18,500.00 | 89.86 | 269.990 | 6,846.02 | 1,946.78 | -11,794.21 | 11,947.97 | 0.00 | 0.00 | 0.00 |
| 18,600.00 | 89.86 | 269.990 | 6,846.27 | 1,946.77 | -11,894.21 | 12,047.09 | 0.00 | 0.00 | 0.00 |
| 18,700.00 | 89.86 | 269.990 | 6,846.52 | 1,946.75 | -11,994.21 | 12,146.21 | 0.00 | 0.00 | 0.00 |
| 18,800.00 | 89.86 | 269.990 | 6,846.77 | 1,946.73 | -12,094.21 | 12,245.33 | 0.00 | 0.00 | 0.00 |
| 18,900.00 | 89.86 | 269.990 | 6,847.01 | 1,946.71 | -12,194.21 | 12,344.46 | 0.00 | 0.00 | 0.00 |
| 19,000.00 | 89.86 | 269.990 | 6,847.26 | 1,946.69 | -12,294.21 | 12,443.58 | 0.00 | 0.00 | 0.00 |
| 19,100.00 | 89.86 | 269.989 | 6,847.51 | 1,946.68 | -12,394.21 | 12,542.70 | 0.00 | 0.00 | 0.00 |
| 19,200.00 | 89.86 | 269.989 | 6,847.75 | 1,946.66 | -12,494.21 | 12,641.83 | 0.00 | 0.00 | 0.00 |
| 19,300.00 | 89.86 | 269.989 | 6,848.00 | 1,946.64 | -12,594.21 | 12,740.95 | 0.00 | 0.00 | 0.00 |
| 19,400.00 | 89.86 | 269.989 | 6,848.25 | 1,946.62 | -12,694.21 | 12,840.07 | 0.00 | 0.00 | 0.00 |
| 19,500.00 | 89.86 | 269.989 | 6,848.50 | 1,946.60 | -12,794.21 | 12,939.19 | 0.00 | 0.00 | 0.00 |
| 19,600.00 | 89.86 | 269.989 | 6,848.74 | 1,946.58 | -12,894.21 | 13,038.32 | 0.00 | 0.00 | 0.00 |
| 19,700.00 | 89.86 | 269.989 | 6,848.99 | 1,946.56 | -12,994.20 | 13,137.44 | 0.00 | 0.00 | 0.00 |
| 19,800.00 | 89.86 | 269.989 | 6,849.24 | 1,946.54 | -13,094.20 | 13,236.56 | 0.00 | 0.00 | 0.00 |
| 19,900.00 | 89.86 | 269.989 | 6,849.48 | 1,946.52 | -13,194.20 | 13,335.68 | 0.00 | 0.00 | 0.00 |
| 20,000.00 | 89.86 | 269.989 | 6,849.73 | 1,946.50 | -13,294.20 | 13,434.81 | 0.00 | 0.00 | 0.00 |
| 20,100.00 | 89.86 | 269.988 | 6,849.98 | 1,946.48 | -13,394.20 | 13,533.93 | 0.00 | 0.00 | 0.00 |

Hilcorp Energy Company

# Lonestar Consulting, LLC
Planning Report

LONESTAR CONSULTING

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Planned Survey**

| Measured Depth (ft) | Inclination (°) | Azimuth (°) | Vertical Depth (ft) | +N/-S (ft) | +E/-W (ft) | Vertical Section (ft) | Dogleg Rate (°/100usft) | Build Rate (°/100usft) | Turn Rate (°/100usft) |
|---|---|---|---|---|---|---|---|---|---|
| 20,200.00 | 89.86 | 269.988 | 6,850.22 | 1,946.46 | -13,494.20 | 13,633.05 | 0.00 | 0.00 | 0.00 |
| 20,300.00 | 89.86 | 269.988 | 6,850.47 | 1,946.44 | -13,594.20 | 13,732.17 | 0.00 | 0.00 | 0.00 |
| 20,400.00 | 89.86 | 269.988 | 6,850.72 | 1,946.42 | -13,694.20 | 13,831.30 | 0.00 | 0.00 | 0.00 |
| 20,500.00 | 89.86 | 269.988 | 6,850.96 | 1,946.40 | -13,794.20 | 13,930.42 | 0.00 | 0.00 | 0.00 |
| 20,600.00 | 89.86 | 269.988 | 6,851.21 | 1,946.38 | -13,894.20 | 14,029.54 | 0.00 | 0.00 | 0.00 |
| 20,700.00 | 89.86 | 269.988 | 6,851.46 | 1,946.36 | -13,994.20 | 14,128.66 | 0.00 | 0.00 | 0.00 |
| 20,800.00 | 89.86 | 269.988 | 6,851.70 | 1,946.34 | -14,094.20 | 14,227.79 | 0.00 | 0.00 | 0.00 |
| 20,900.00 | 89.86 | 269.988 | 6,851.95 | 1,946.32 | -14,194.20 | 14,326.91 | 0.00 | 0.00 | 0.00 |
| 21,000.00 | 89.86 | 269.988 | 6,852.20 | 1,946.30 | -14,294.20 | 14,426.03 | 0.00 | 0.00 | 0.00 |
| 21,100.00 | 89.86 | 269.988 | 6,852.44 | 1,946.27 | -14,394.20 | 14,525.15 | 0.00 | 0.00 | 0.00 |
| 21,200.00 | 89.86 | 269.987 | 6,852.69 | 1,946.25 | -14,494.20 | 14,624.28 | 0.00 | 0.00 | 0.00 |
| 21,300.00 | 89.86 | 269.987 | 6,852.94 | 1,946.23 | -14,594.20 | 14,723.40 | 0.00 | 0.00 | 0.00 |
| 21,325.70 | 89.86 | 269.987 | 6,853.00 | 1,946.22 | -14,619.90 | 14,748.87 | 0.00 | 0.00 | 0.00 |

**Design Targets**

| Target Name - hit/miss target - Shape | Dip Angle (°) | Dip Dir. (°) | TVD (ft) | +N/-S (ft) | +E/-W (ft) | Northing (usft) | Easting (usft) | Latitude | Longitude |
|---|---|---|---|---|---|---|---|---|---|
| AU 632H LP Rev2<br>- plan hits target center<br>- Point | 0.00 | 0.000 | 6,819.00 | 1,947.70 | -959.49 | 2,184,906.14 | 590,338.50 | 37.004092 | -107.523955 |
| AU 632H BHL Rev1<br>- plan hits target center<br>- Point | 0.00 | 0.000 | 6,853.00 | 1,946.22 | -14,619.90 | 2,184,859.80 | 576,678.20 | 37.004077 | -107.570737 |

**Casing Points**

| Measured Depth (ft) | Vertical Depth (ft) | Name | Casing Diameter (in) | Hole Diameter (in) |
|---|---|---|---|---|
| 700.00 | 700.00 | 13 3/8" | 13.37 | 17.50 |
| 6,670.55 | 6,200.00 | 9 5/8" | 9.62 | 12.25 |
| 21,325.70 | 6,853.00 | 5 1/2" | 5.50 | 8.50 |

Hilcorp Energy Company

# Lonestar Consulting, LLC
Planning Report

LONESTAR CONSULTING

| | | | |
|---|---|---|---|
| **Database:** | edm | **Local Co-ordinate Reference:** | Well Allison Unit 632H - Slot 05 |
| **Company:** | Hilcorp Energy - San Juan Basin | **TVD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Project:** | San Juan, NM NAD27 | **MD Reference:** | GL 6350' & RKB 25.1 @ 6375.10ft (Nabors B29) |
| **Site:** | Allison Unit 611H Pad | **North Reference:** | True |
| **Well:** | Allison Unit 632H | **Survey Calculation Method:** | Minimum Curvature |
| **Wellbore:** | OH | | |
| **Design:** | Plan #2 | | |

**Formations**

| Measured Depth (ft) | Vertical Depth (ft) | Name | Lithology | Dip (°) | Dip Direction (°) |
|---|---|---|---|---|---|
| 2,166.98 | 2,084.00 | OJO ALAMO (SS) | | 0.00 | 0.000 |
| 2,243.13 | 2,150.00 | KIRTLAND (SHALE + coal) | | 0.00 | 0.000 |
| 2,740.35 | 2,581.00 | FRUITLAND (shale + COAL) | | 0.00 | 0.000 |
| 3,166.05 | 2,950.00 | PICTURED CLIFFS (ss) | | 0.00 | 0.000 |
| 3,762.50 | 3,467.00 | LEWIS SHALE | | 0.00 | 0.000 |
| 5,366.47 | 4,900.00 | CLIFFHOUSE | | 0.00 | 0.000 |
| 5,744.46 | 5,274.00 | MENEFEE | | 0.00 | 0.000 |
| 5,925.52 | 5,455.00 | POINT LOOKOUT | | 0.00 | 0.000 |
| 6,444.53 | 5,974.00 | MANCOS | | 0.00 | 0.000 |

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505



## CONDITIONS

| Operator: | OGRID: |
|---|---|
| HILCORP ENERGY COMPANY<br>1111 Travis Street<br>Houston, TX 77002 | 372171 |
| | Action Number:<br>498079 |
| | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| ward.rikala | No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations. | 9/9/2025 |
| ward.rikala | Any previous COA's not addressed within the updated COA's still apply. | 9/9/2025 |