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. 05-067-10062/30-045-38411

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 631H

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) : 498' feet from the North line and 1560' 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 A Walker 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: 404318015

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 10062 00 ID Number: 489731
Name: Allison Unit Number: 631H
Location QtrQtr: SWNE 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 36.998692 Longitude -107.521278
GPS Quality Value: 1.8 Type of GPS Quality Value: PDOP Measurement Date: 07/10/2025
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**:						529	FNL	1635	FWL	
Change of **Surface** Footage **To**:						498	FNL	1560	FWL	
Current **Surface** Location **From**	QtrQtr	SWNE	Sec	20	Twp 32N	Range	6W	Meridian	N	
New **Surface** Location **To**	QtrQtr	SWNE	Sec	12	Twp 32N	Range	7W	Meridian	N	
Change of **Top of Productive Zone** Footage **From**:						1920	FNL	1411	FEL	
Change of **Top of Productive Zone** Footage **To**:						1906	FNL	2160	FEL	**
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		FEL		
Change of **Base of Productive Zone** Footage **To**:	2000	FNL	2032	FEL	**	
Current **Base of Productive Zone** Location	Sec		Twp		Range	
New **Base of Productive Zone** Location	Sec	22	Twp	32N	Range	6W
Change of **Bottomhole** Footage **From**:	2000	FNL	1775	FEL		
Change of **Bottomhole** Footage **To**:	2001	FNL	1775	FEL	**	
Current **Bottomhole** Location	Sec	22	Twp	32N	Range	6W
New **Bottomhole** Location	Sec	22	Twp	32N	Range	6W

** 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:	865	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: 889 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: 1011 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	679	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 631H 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	6826	711	6826	0
2ND	8+1/2	5+1/2	P110	20	0	18557	2562	18557	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	2150	2084	0-500	USGS	Possible Water
Groundwater	Ojo Alamo	2150	2084	2220	2150	501-1000	USGS	Possible Water
Confining Layer	Kirtland	2220	2150	2682	2581	1001-10000	USGS	Gas & Water
Hydrocarbon	Fruitland	2682	2581	3076	2950	1001-10000	USGS	Gas & Water
Hydrocarbon	Pictured Cliffs	3076	2950	3630	3467			Possible Gas
Confining Layer	Lewis Shale	3630	3467	5163	4900			None
Hydrocarbon	Cliffhouse	5163	4900	5563	5274			Possible Gas
Confining Layer	Menefee	5563	5274	5757	5455			None
Hydrocarbon	Point Lookout	5757	5455	6312	5974			Gas
Hydrocarbon	Mancos	6312	5974	6512	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:

The SHL is in NM (3004538411) Sec, 12, T32N, R7W Lot 3. BHL and all production will be from CO.

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.
1 COA	

General Comments

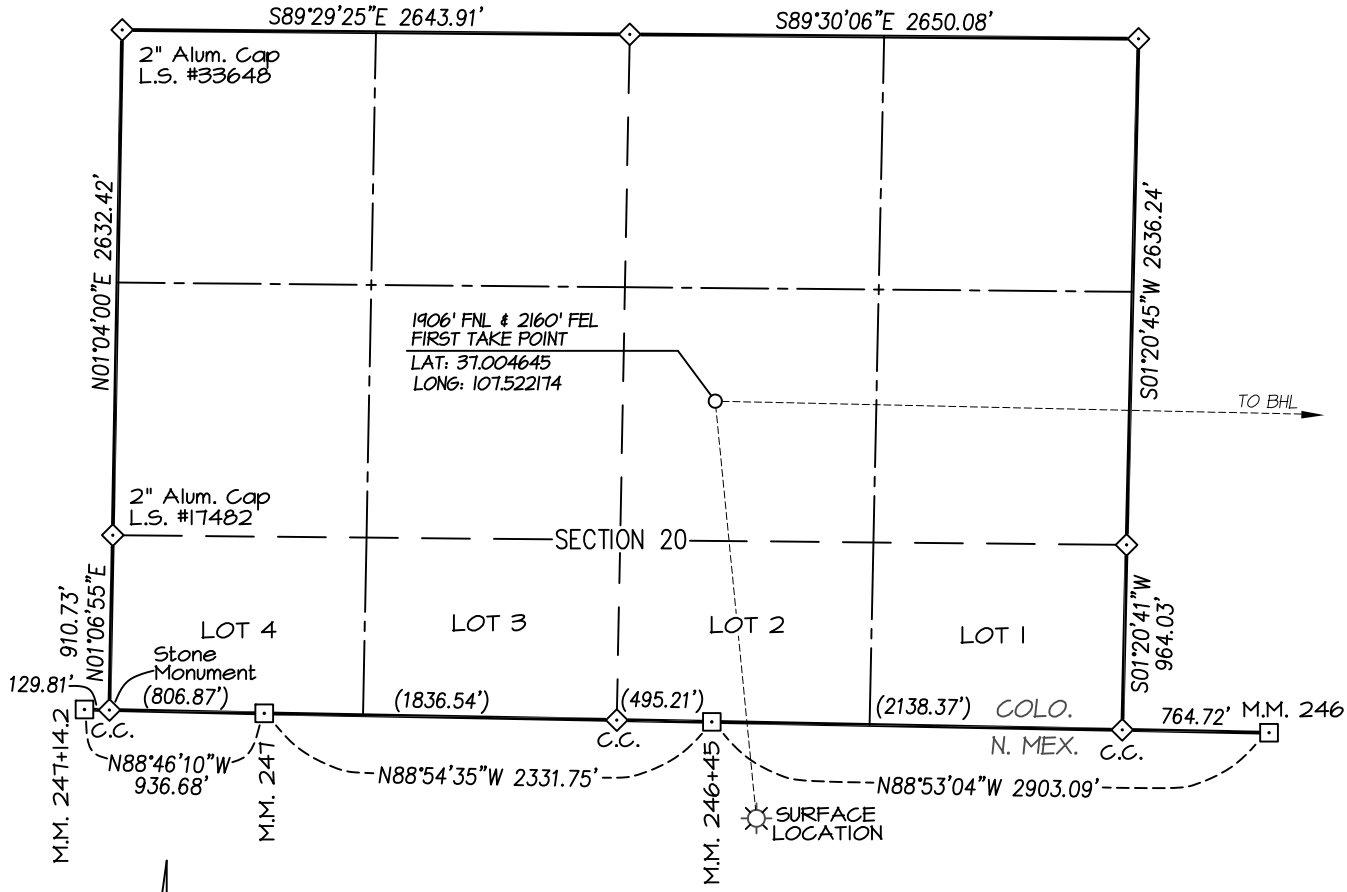
User Group	Comment	Comment Date
Engineer	Offset well evaluation has no changes to Form 2 COA.	08/20/2025
Total: 1 comment(s)		

ATTACHMENT LIST

Att Doc Num	Name
404318015	SUNDRY NOTICE APPROVED-LOC-SFTY-STBK-MNRL-STBK-OBJ-DRLG-CSG
404318053	WELL LOCATION PLAT
404318060	OPERATIONS SUMMARY
404318065	DIRECTIONAL DATA
404323729	FORM 4 SUBMITTED
Total Attach: 5 Files	

HILCORP ENERGY COMPANY: ALLISON UNIT #631H

SURFACE LOCATION: 498' FNL & 1560' FWL
SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'
BOTTOM HOLE LOCATION: 2001' FNL, 1775' FEL
SECTION 22, T-32-N, R-6-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:

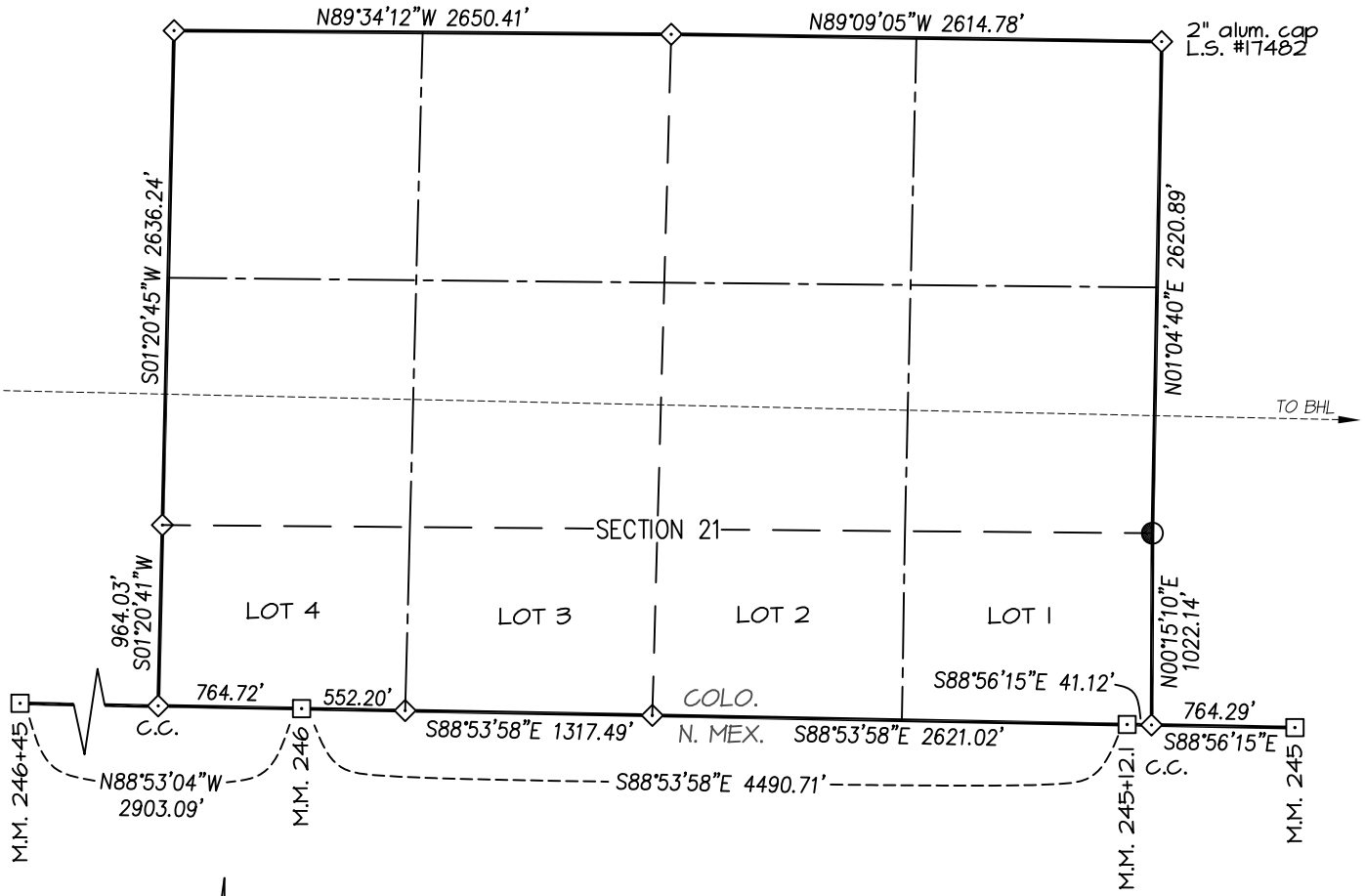
SEE SHEET 4 OF 4 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 1 OF 4

SURVEYED: 12/11/24	PREPARED FOR:
DRAWN: 7/10/25	HILCORP ENERGY COMPANY
JOB NO. HC005	
DRAWN BY: K.R.	NORTHSTAR
CHECKED BY: K.R.	SURVEYING & MAPPING, INC.
FILE NO.: 631WP1	768 County Rd. 308
	DURANGO, CO. 81303
	(970) 385-0851

HILCORP ENERGY COMPANY: ALLISON UNIT #631H

SURFACE LOCATION: 498' FNL & 1560' FWL
SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'
BOTTOM HOLE LOCATION: 2001' FNL, 1775' FEL
SECTION 22, T-32-N, R-6-W, N.M.P.M., LA PLATA COUNTY, COLORADO.



◓ and ◒ denote found 3-1/4" B.L.M. Brass Cap unless otherwise noted.

⊡ denotes found 1925 Supreme Court Mile Marker Brass Tab

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

GRAPHIC SCALE 1"=1000'

0 1000 2000

NOTE:

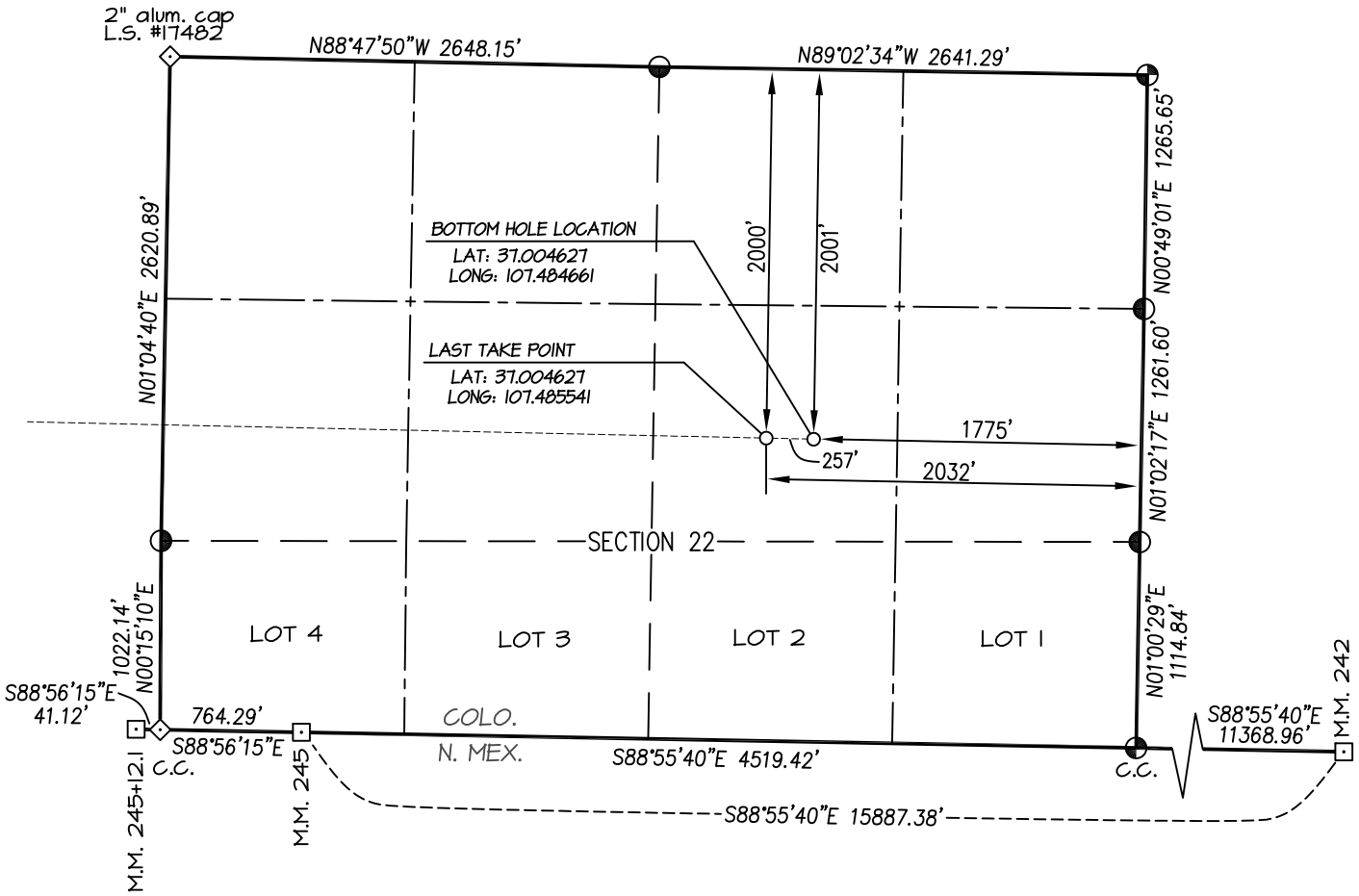
SEE SHEET 4 OF 4 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 2 OF 4

SURVEYED: 12/11/24	PREPARED FOR:
DRAWN: 7/10/25	HILCORP ENERGY COMPANY
JOB NO. HC005	
DRAWN BY: K.R.	NORTHSTAR
CHECKED BY: K.R.	SURVEYING & MAPPING, INC.
FILE NO.: 631WP2	768 County Rd. 308 DURANGO, CO. 81303 (970) 385-0851

HILCORP ENERGY COMPANY: ALLISON UNIT #631H

SURFACE LOCATION: 498' FNL & 1560' FWL
SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'
BOTTOM HOLE LOCATION: 2001' FNL, 1775' FEL
SECTION 22, T-32-N, R-6-W, N.M.P.M., LA PLATA COUNTY, COLORADO.



◓ and ◒ denote found 3-1/4" B.L.M. Brass Cap unless otherwise noted.

⊡ denotes found 1925 Supreme Court Mile Marker Brass Tab

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

GRAPHIC SCALE 1"=1000'

0 1000 2000

NOTE:

SEE SHEET 4 OF 4 FOR COORDINATE TABLE, SURVEY NOTES, AND SURVEYOR'S CERTIFICATE.

SHEET 3 OF 4

DRAWN BY: K.R.	SURVEYED: 12/11/24	PREPARED FOR: HILCORP ENERGY COMPANY
CHECKED BY: K.R.	DRAWN: 7/10/25	
FILE NO.: 631WP3	JOB NO. HC005	

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

HILCORP ENERGY COMPANY: ALLISON UNIT #631H

SURFACE LOCATION: 498' FNL & 1560' FWL
SECTION 12, T-32-N, R-7-W, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO. ELEVATION: 6352'
BOTTOM HOLE LOCATION: 2001' FNL, 1775' FEL
SECTION 22, T-32-N, R-6-W, N.M.P.M., LA PLATA COUNTY, COLORADO.

ALLISON UNIT #631H	CSZ NAD '83	NAD '83	TIES	SEC/TWP/RNG
SURFACE HOLE LOCATION	N (Y) = 1,127,285.14' E (X) = 2,409,727.15'	LAT: 36.998692°N LONG: 107.521278°W	498' FNL 1560' FWL	SECTION 12 (N. MEX.) T-32-N, R-7-W
FIRST TAKE POINT	N (Y) = 1,129,458.00' E (X) = 2,409,512.53'	LAT: 37.004645°N LONG: 107.522174°W	1906' FNL 2160' FEL	SECTION 20 (COLO.) T-32-N, R-6-W
LAST TAKE POINT	N (Y) = 1,129,222.10' E (X) = 2,420,207.90'	LAT: 37.004627°N LONG: 107.485541°W	2000' FNL 2032' FEL	SECTION 22 (COLO.) T-32-N, R-6-W
BOTTOM HOLE LOCATION	N (Y) = 1,129,216.32' E (X) = 2,420,464.80'	LAT: 37.004627°N LONG: 107.484661°W	2001' FNL 1775' FEL	SECTION 22 (COLO.) T-32-N, R-6-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 4 OF 4

DRAWN BY: K.R. | SURVEYED: 12/11/24
CHECKED BY: K.R. | DRAWN: 7/10/25
FILE NO.: 631WP4 | JOB NO. HC005

PREPARED FOR:
HILCORP ENERGY COMPANY

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

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

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
0506710062/3004538411	97232	BASIN MANCOS

Property Code	Property Name	Well Number
318864	ALLISON UNIT	631H

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	498' NORTH	1560' WEST	36.998692 °N	-107.521278 °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
G	22	32N	6W		2001' NORTH	1775' EAST	37.004627 °N	-107.484661 °W	LA PLATA (CO)

Penetrated Spacing Unit:

Dedicated Acres		Infill or Defining Well	Defining Well API	Overlapping Spacing Unit	Consolidation Code
1143.60	Entire Section 20 & 21, T32N, R6W S/2 (aka LOTS 1-4), S/2 NW/4, SW/4 NE/4 - Section 22, T32N, R6W	Infill	30-045-38410	☐ 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	498' NORTH	1560' WEST	36.998692 °N	-107.521278 °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
G	20	32N	6W		1906' NORTH	2160' EAST	37.004645 °N	-107.522174 °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
G	22	32N	6W		2000' NORTH	2032' EAST	37.004627 °N	-107.485541 °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
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.

~ FEE SURFACE OWNERS ~

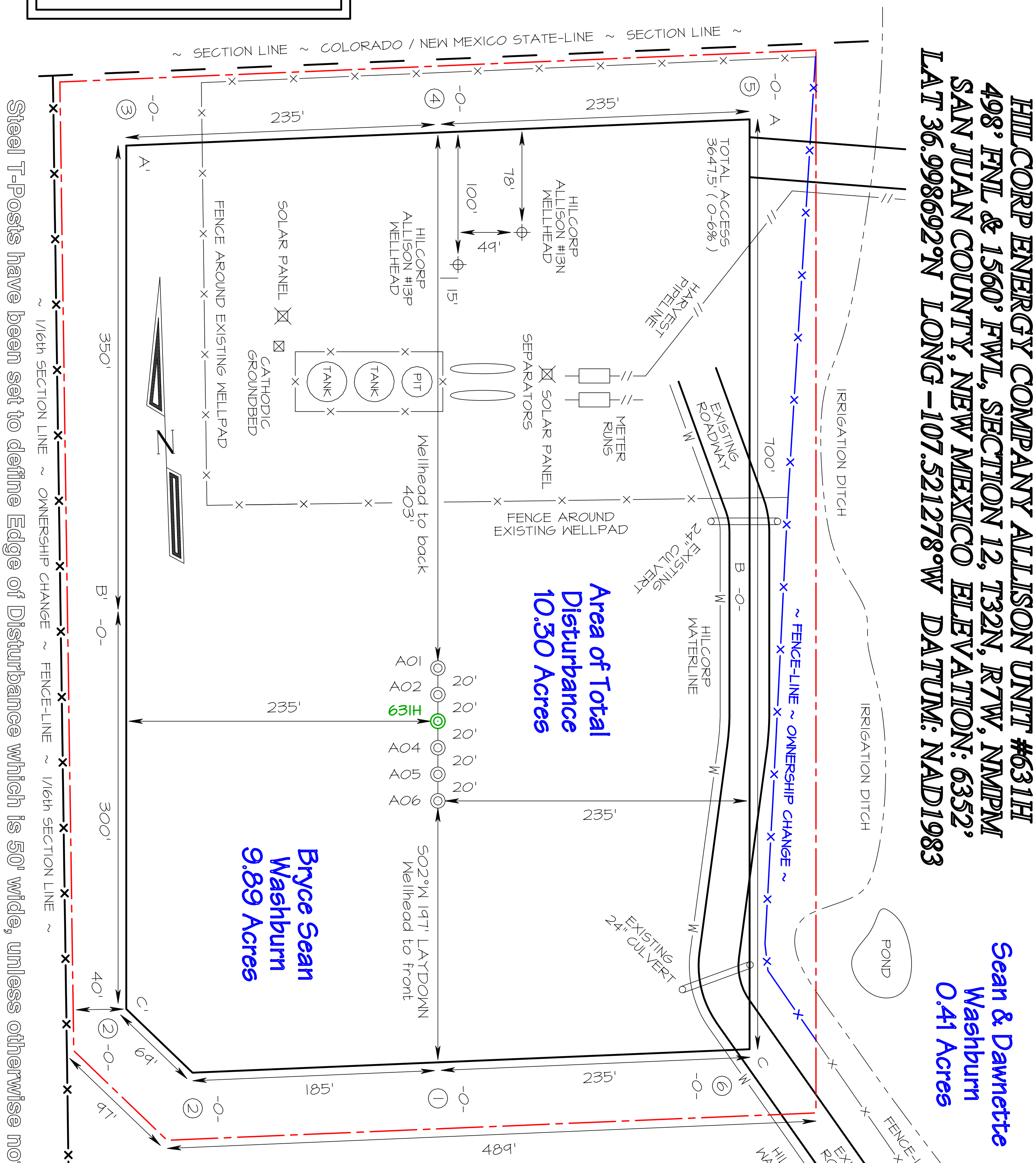
Bryce Sean Washburn &
Sean and Dawnette Washburn

GRAPHIC SCALE 1"=100'

0 100 200

3647.5' TOTAL LENGTH OF ACCESS

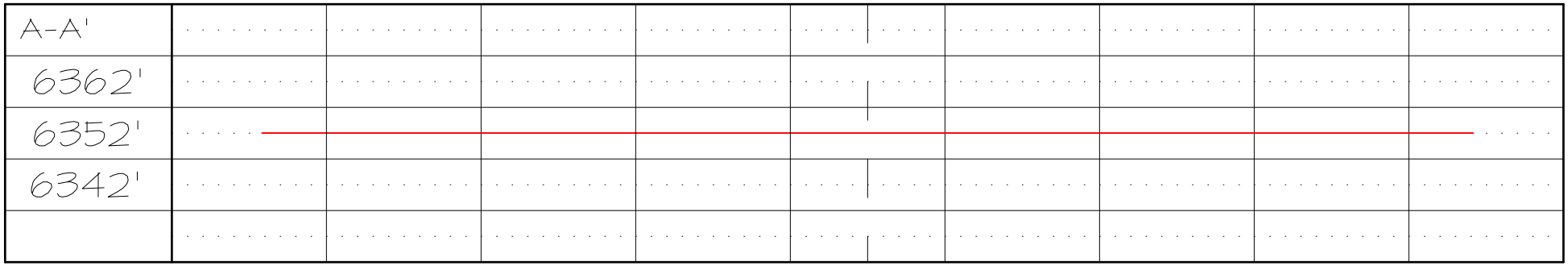
31.6' SAN JUAN COUNTY (CR #4020)
3570.6' SEAN & DAWNETTE WASHBURN
45.3' BRYCE SEAN WASHBURN



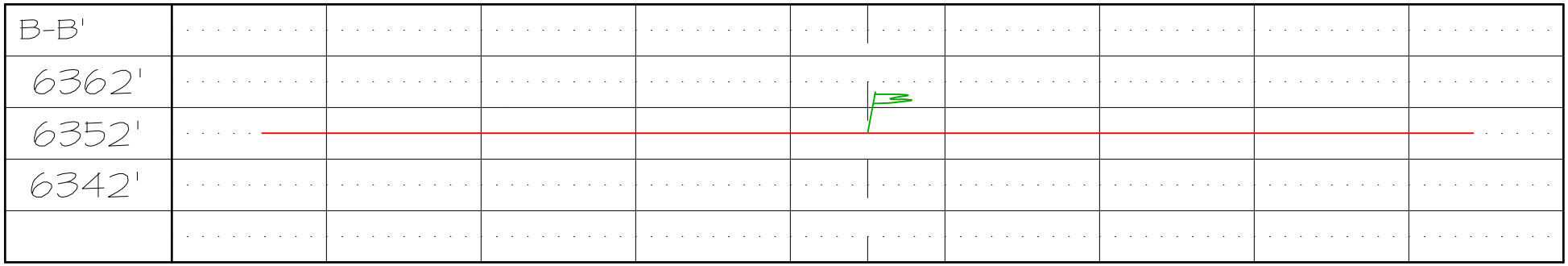
A01 - ALLISON UNIT #633H
A02 - ALLISON UNIT #632H
A03 - ALLISON UNIT #631H
A04 - ALLISON UNIT #614H
A05 - ALLISON UNIT #630H
A06 - ALLISON UNIT #611H

HILCORP ENERGY COMPANY ALLISON UNIT #631H
498' FNL & 1560' FWL, SECTION 12, T32N, R7W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6352'

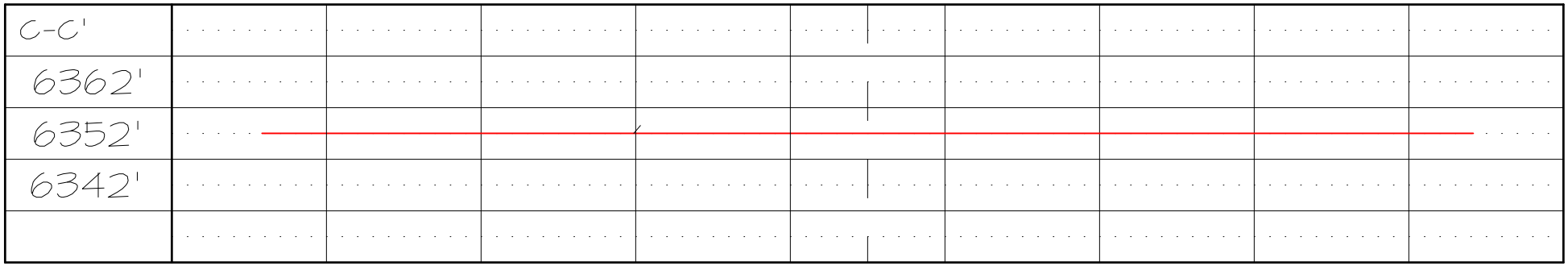
HORIZONTAL SCALE 1"=60' C/L VERTICAL SCALE 1"=30'



C/L



C/L

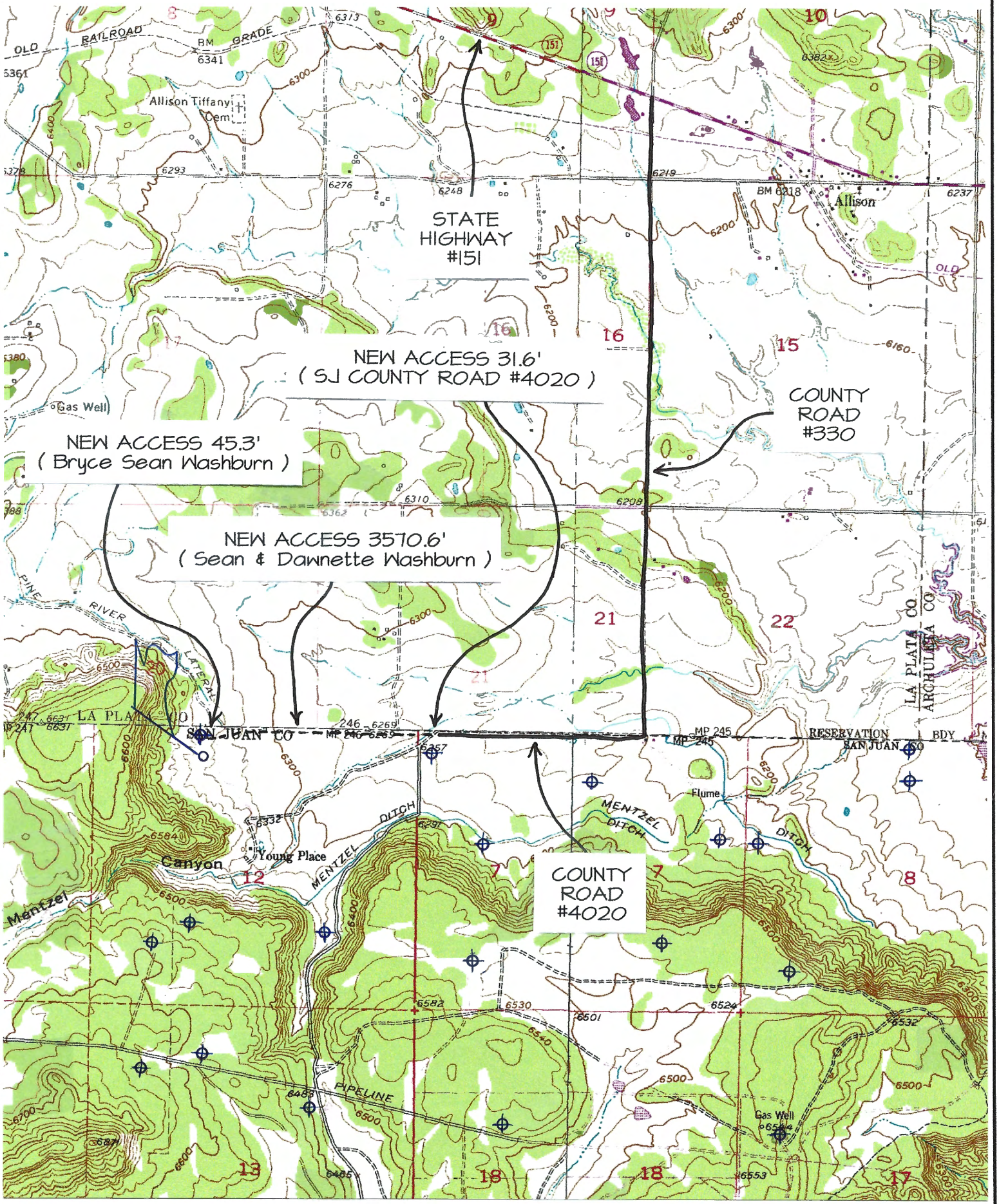


EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES.

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 #631H

498' FNL & 1560' 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 #631H

498' FNL & 1560' FWL, Section 12, T32N, R7W, N.M.P.M., San Juan County, NM

Latitude 36.998692°N Longitude -107.521278°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 #631H existing wellpad.

La Plata County, CO Allison Unit 631H

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 631H	Ground Elevation (ft. MSL):	6,350’
Surface Hole Location:	36.998687° N, -107.520671° W	Total Measured Depth (ft.)	18,557’
Bottom Hole Location:	37.004622° N, -107.484055° 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 631H

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'	6,826'/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'	18,557'/6,798'	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	4.1	3.3
Production	3.0	3.1	2.1	1.8

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 631H

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. 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 Yield: 1.38 ft^3/sk	14.6	Surface
		Slurry Additives: CaCl (1%), Cello Flake (0.25 lb/sk), CD-2 (0.2%)						
Intermediate	6,826’	Lead	1,937 ft^3	378	25%	ASTM Type IL 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	715 ft^3	333	25%	ASTM Type IL 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	18,557’	Lead	426 ft^3	271	25%	ASTM Type IL 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	3,391 ft^3	2,291	25%	Class G Yield: 1.48 ft^3/sk	14.0	6,700’
		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' – 6,826'
Production	Oil Base Mud	10.0 – 12.0	6 – 8	70/30 – 75/25	6,826' – 18,557'

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: 1,925 bbls (10,805 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.

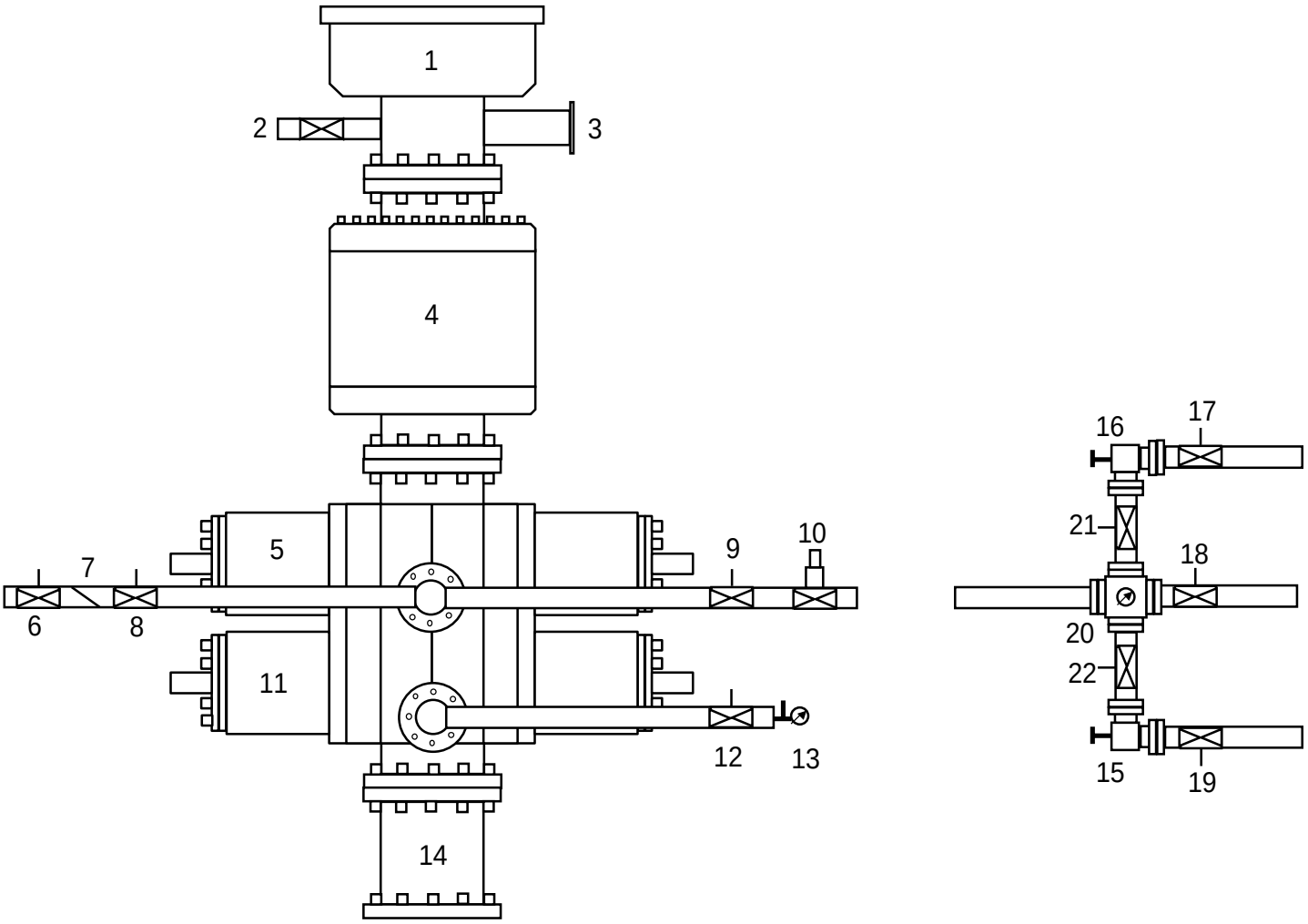
*NOTE: Although this horizontal well may be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 8(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable 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 631H

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 631H
OH
Plan #2

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

Northing	Easting	Latitude	Longitude
2182941.58	591303.86	36.998687	-107.520671

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
04 System Datum: Mean Sea Level

LONESTAR CONSULTING

Plan: Plan #2 (Allison Unit 631H/OH)

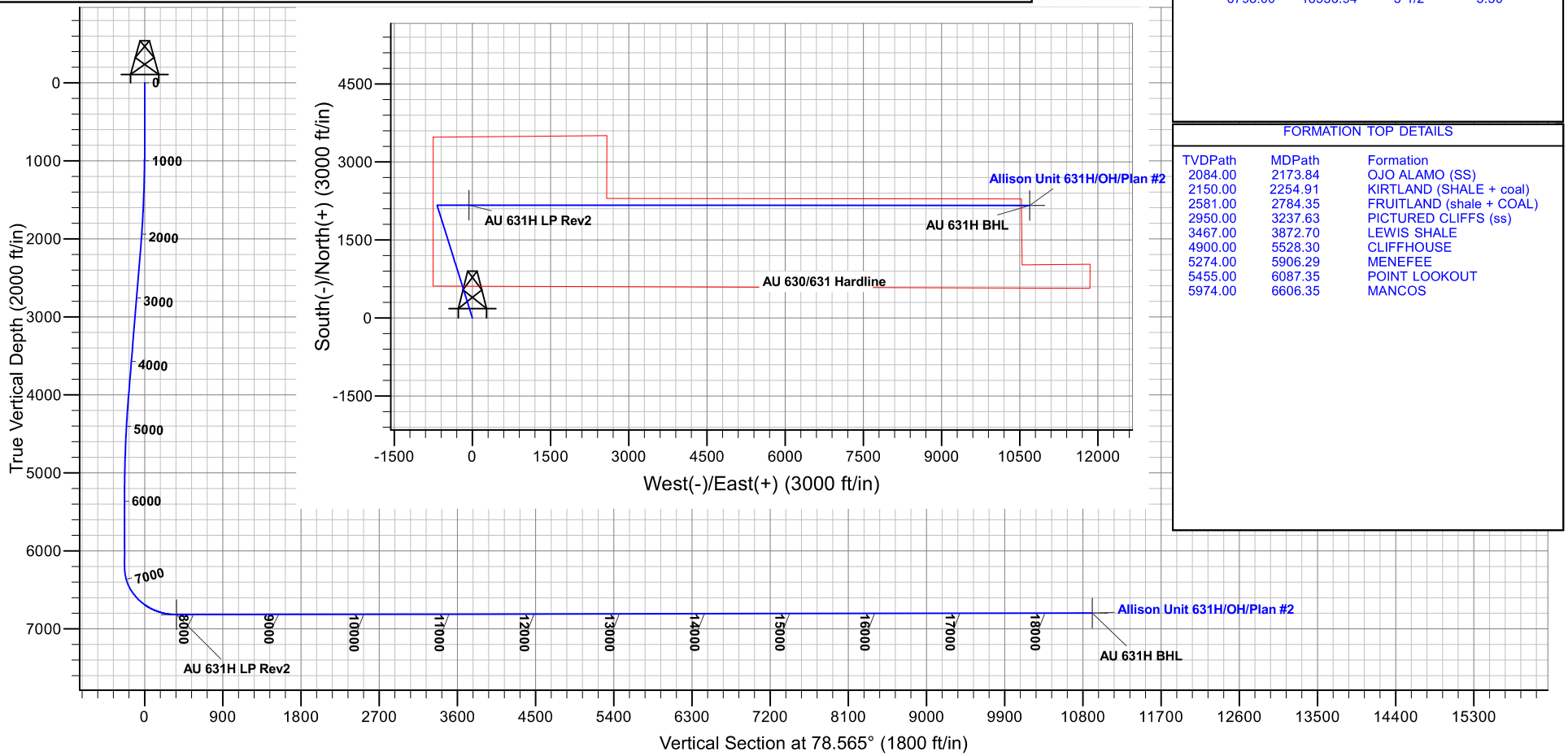
Created By: Janie Collins Date: 10:15, March 28 2025

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
2170.17	35.50	342.672	2081.01	406.77	-126.91	2.50	-43.75	Start 2442.02 hold at 2170.17 MD
4612.18	35.50	342.672	4068.99	1760.64	-549.32	0.00	-189.36	Start Drop -2.50
6032.35	0.00	0.000	5400.00	2167.41	-676.23	2.50	-233.11	Start 808.55 hold at 6032.35 MD
6840.90	0.00	0.000	6208.55	2167.41	-676.23	0.00	-233.11	Start DLS 9.40 TFO 90.00
7799.36	90.11	90.000	6818.00	2167.41	-65.65	9.40	365.35	Start DLS 0.00 TFO 89.98
18556.94	90.11	90.051	6798.00	2162.62	10691.92	0.00	10908.44	TD at 18556.94

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
AU 631H BHL	6798.00	2162.62	10691.92	2185139.30	601988.60	37.004622	-107.484055
AU 631H LP Rev2	6818.00	2167.41	-65.65	2185108.76	591231.10	37.004640	-107.520896



T
M

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	6832.35	9 5/8"	9.62
6798.00	18556.94	5 1/2"	5.50

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2084.00	2173.84	OJO ALAMO (SS)
2150.00	2254.91	KIRTLAND (SHALE + coal)
2581.00	2784.35	FRUITLAND (shale + COAL)
2950.00	3237.63	PICTURED CLIFFS (ss)
3467.00	3872.70	LEWIS SHALE
4900.00	5528.30	CLIFFHOUSE
5274.00	5906.29	MENEFEE
5455.00	6087.35	POINT LOOKOUT
5974.00	6606.35	MANCOS

Hilcorp Energy - San Juan Basin

San Juan, NM NAD27
Allison Unit 611H Pad
Allison Unit 631H - Slot 04

OH

Plan: Plan #2

Standard Planning Report

28 March, 2025

Hilcorp Energy Company

Lonestar Consulting, LLC

Planning Report

LONESTAR CONSULTING

Database:	edm	**Local Co-ordinate Reference:**	Well Allison Unit 631H - Slot 04
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 631H	**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 631H - Slot 04

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,182,941.58 usft	**Latitude:**	36.998687
	+E/-W	0.00 ft	**Easting:**	591,303.87 usft	**Longitude:**	-107.520671
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	78.565

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

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	18,556.94	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 631H - Slot 04
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 631H	**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	
2,170.17	35.50	342.672	2,081.01	406.77	-126.91	2.50	2.50	0.00	342.67	
4,612.18	35.50	342.672	4,068.99	1,760.64	-549.32	0.00	0.00	0.00	0.00	
6,032.35	0.00	0.000	5,400.00	2,167.41	-676.23	2.50	-2.50	0.00	180.00	
6,840.90	0.00	0.000	6,208.55	2,167.41	-676.23	0.00	0.00	0.00	0.00	
7,799.36	90.11	90.000	6,818.00	2,167.41	-65.65	9.40	9.40	9.39	90.00	AU 631H LP Rev2
18,556.94	90.11	90.051	6,798.00	2,162.62	10,691.92	0.00	0.00	0.00	89.98	AU 631H BHL

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison Unit 631H - Slot 04
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 631H	**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	342.672	800.00	0.52	-0.16	-0.06	2.50	2.50	0.00
900.00	3.75	342.672	899.89	4.68	-1.46	-0.50	2.50	2.50	0.00
1,000.00	6.25	342.672	999.50	13.00	-4.06	-1.40	2.50	2.50	0.00
1,100.00	8.75	342.672	1,098.64	25.46	-7.94	-2.74	2.50	2.50	0.00
1,200.00	11.25	342.672	1,197.11	42.04	-13.12	-4.52	2.50	2.50	0.00
1,300.00	13.75	342.672	1,294.74	62.70	-19.56	-6.74	2.50	2.50	0.00
1,400.00	16.25	342.672	1,391.32	87.40	-27.27	-9.40	2.50	2.50	0.00
1,500.00	18.75	342.672	1,486.69	116.11	-36.23	-12.49	2.50	2.50	0.00
1,600.00	21.25	342.672	1,580.65	148.75	-46.41	-16.00	2.50	2.50	0.00
1,700.00	23.75	342.672	1,673.03	185.28	-57.81	-19.93	2.50	2.50	0.00
1,800.00	26.25	342.672	1,763.65	225.62	-70.39	-24.27	2.50	2.50	0.00
1,900.00	28.75	342.672	1,852.35	269.70	-84.15	-29.01	2.50	2.50	0.00
2,000.00	31.25	342.672	1,938.94	317.43	-99.04	-34.14	2.50	2.50	0.00
2,100.00	33.75	342.672	2,023.27	368.71	-115.04	-39.66	2.50	2.50	0.00
2,170.17	35.50	342.672	2,081.01	406.77	-126.91	-43.75	2.50	2.50	0.00
2,200.00	35.50	342.672	2,105.30	423.31	-132.07	-45.53	0.00	0.00	0.00
2,300.00	35.50	342.672	2,186.70	478.75	-149.37	-51.49	0.00	0.00	0.00
2,400.00	35.50	342.672	2,268.11	534.19	-166.67	-57.45	0.00	0.00	0.00
2,500.00	35.50	342.672	2,349.52	589.63	-183.97	-63.42	0.00	0.00	0.00
2,600.00	35.50	342.672	2,430.93	645.07	-201.26	-69.38	0.00	0.00	0.00
2,700.00	35.50	342.672	2,512.33	700.51	-218.56	-75.34	0.00	0.00	0.00
2,800.00	35.50	342.672	2,593.74	755.96	-235.86	-81.31	0.00	0.00	0.00
2,900.00	35.50	342.672	2,675.15	811.40	-253.15	-87.27	0.00	0.00	0.00
3,000.00	35.50	342.672	2,756.55	866.84	-270.45	-93.23	0.00	0.00	0.00
3,100.00	35.50	342.672	2,837.96	922.28	-287.75	-99.19	0.00	0.00	0.00
3,200.00	35.50	342.672	2,919.37	977.72	-305.05	-105.16	0.00	0.00	0.00
3,300.00	35.50	342.672	3,000.78	1,033.16	-322.34	-111.12	0.00	0.00	0.00
3,400.00	35.50	342.672	3,082.18	1,088.60	-339.64	-117.08	0.00	0.00	0.00
3,500.00	35.50	342.672	3,163.59	1,144.04	-356.94	-123.05	0.00	0.00	0.00
3,600.00	35.50	342.672	3,245.00	1,199.48	-374.24	-129.01	0.00	0.00	0.00
3,700.00	35.50	342.672	3,326.41	1,254.92	-391.53	-134.97	0.00	0.00	0.00
3,800.00	35.50	342.672	3,407.81	1,310.36	-408.83	-140.93	0.00	0.00	0.00
3,900.00	35.50	342.672	3,489.22	1,365.80	-426.13	-146.90	0.00	0.00	0.00
4,000.00	35.50	342.672	3,570.63	1,421.24	-443.43	-152.86	0.00	0.00	0.00
4,100.00	35.50	342.672	3,652.04	1,476.68	-460.72	-158.82	0.00	0.00	0.00
4,200.00	35.50	342.672	3,733.44	1,532.12	-478.02	-164.79	0.00	0.00	0.00
4,300.00	35.50	342.672	3,814.85	1,587.56	-495.32	-170.75	0.00	0.00	0.00
4,400.00	35.50	342.672	3,896.26	1,643.00	-512.62	-176.71	0.00	0.00	0.00
4,500.00	35.50	342.672	3,977.67	1,698.44	-529.91	-182.67	0.00	0.00	0.00
4,600.00	35.50	342.672	4,059.07	1,753.88	-547.21	-188.64	0.00	0.00	0.00
4,612.18	35.50	342.672	4,068.99	1,760.64	-549.32	-189.36	0.00	0.00	0.00
4,700.00	33.31	342.672	4,141.44	1,808.00	-564.10	-194.46	2.50	-2.50	0.00
4,800.00	30.81	342.672	4,226.18	1,858.67	-579.90	-199.91	2.50	-2.50	0.00

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison Unit 631H - Slot 04
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 631H	**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	28.31	342.672	4,313.16	1,905.76	-594.59	-204.97	2.50	-2.50	0.00
5,000.00	25.81	342.672	4,402.21	1,949.18	-608.14	-209.64	2.50	-2.50	0.00
5,100.00	23.31	342.672	4,493.16	1,988.85	-620.52	-213.91	2.50	-2.50	0.00
5,200.00	20.81	342.672	4,585.83	2,024.70	-631.71	-217.77	2.50	-2.50	0.00
5,300.00	18.31	342.672	4,680.05	2,056.66	-641.68	-221.20	2.50	-2.50	0.00
5,400.00	15.81	342.672	4,775.64	2,084.66	-650.41	-224.21	2.50	-2.50	0.00
5,500.00	13.31	342.672	4,872.42	2,108.65	-657.90	-226.79	2.50	-2.50	0.00
5,600.00	10.81	342.672	4,970.21	2,128.60	-664.12	-228.94	2.50	-2.50	0.00
5,700.00	8.31	342.672	5,068.81	2,144.45	-669.07	-230.64	2.50	-2.50	0.00
5,800.00	5.81	342.672	5,168.05	2,156.18	-672.73	-231.91	2.50	-2.50	0.00
5,900.00	3.31	342.672	5,267.72	2,163.76	-675.09	-232.72	2.50	-2.50	0.00
6,000.00	0.81	342.672	5,367.65	2,167.19	-676.16	-233.09	2.50	-2.50	0.00
6,032.35	0.00	0.000	5,400.00	2,167.41	-676.23	-233.11	2.50	-2.50	0.00
6,100.00	0.00	0.000	5,467.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,200.00	0.00	0.000	5,567.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,300.00	0.00	0.000	5,667.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,400.00	0.00	0.000	5,767.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,500.00	0.00	0.000	5,867.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,600.00	0.00	0.000	5,967.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,700.00	0.00	0.000	6,067.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,800.00	0.00	0.000	6,167.65	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,840.90	0.00	0.000	6,208.55	2,167.41	-676.23	-233.11	0.00	0.00	0.00
6,900.00	5.56	90.000	6,267.56	2,167.41	-673.37	-230.31	9.40	9.40	0.00
7,000.00	14.96	90.000	6,365.85	2,167.41	-655.58	-212.87	9.40	9.40	0.00
7,100.00	24.36	90.000	6,459.92	2,167.41	-621.98	-179.94	9.40	9.40	0.00
7,200.00	33.76	90.000	6,547.23	2,167.41	-573.46	-132.38	9.40	9.40	0.00
7,300.00	43.16	90.000	6,625.45	2,167.41	-511.33	-71.49	9.40	9.40	0.00
7,400.00	52.56	90.000	6,692.46	2,167.41	-437.26	1.11	9.40	9.40	0.00
7,500.00	61.96	90.000	6,746.48	2,167.41	-353.24	83.46	9.40	9.40	0.00
7,600.00	71.36	90.000	6,786.05	2,167.41	-261.53	173.36	9.40	9.40	0.00
7,700.00	80.77	90.000	6,810.10	2,167.41	-164.58	268.38	9.40	9.40	0.00
7,799.36	90.11	90.000	6,818.00	2,167.41	-65.65	365.35	9.40	9.40	0.00
7,800.00	90.11	90.000	6,818.00	2,167.41	-65.00	365.98	0.00	0.00	0.00
7,900.00	90.11	90.001	6,817.81	2,167.41	35.00	464.00	0.00	0.00	0.00
8,000.00	90.11	90.001	6,817.63	2,167.41	135.00	562.01	0.00	0.00	0.00
8,100.00	90.11	90.002	6,817.44	2,167.40	235.00	660.03	0.00	0.00	0.00
8,200.00	90.11	90.002	6,817.26	2,167.40	335.00	758.04	0.00	0.00	0.00
8,300.00	90.11	90.003	6,817.07	2,167.40	435.00	856.05	0.00	0.00	0.00
8,400.00	90.11	90.003	6,816.88	2,167.39	535.00	954.07	0.00	0.00	0.00
8,500.00	90.11	90.003	6,816.70	2,167.39	635.00	1,052.08	0.00	0.00	0.00
8,600.00	90.11	90.004	6,816.51	2,167.38	735.00	1,150.10	0.00	0.00	0.00
8,700.00	90.11	90.004	6,816.33	2,167.37	835.00	1,248.11	0.00	0.00	0.00
8,800.00	90.11	90.005	6,816.14	2,167.36	935.00	1,346.12	0.00	0.00	0.00
8,900.00	90.11	90.005	6,815.95	2,167.36	1,035.00	1,444.14	0.00	0.00	0.00
9,000.00	90.11	90.006	6,815.77	2,167.35	1,135.00	1,542.15	0.00	0.00	0.00
9,100.00	90.11	90.006	6,815.58	2,167.34	1,235.00	1,640.16	0.00	0.00	0.00
9,200.00	90.11	90.007	6,815.40	2,167.32	1,335.00	1,738.17	0.00	0.00	0.00
9,300.00	90.11	90.007	6,815.21	2,167.31	1,435.00	1,836.19	0.00	0.00	0.00
9,400.00	90.11	90.008	6,815.02	2,167.30	1,535.00	1,934.20	0.00	0.00	0.00
9,500.00	90.11	90.008	6,814.84	2,167.28	1,635.00	2,032.21	0.00	0.00	0.00
9,600.00	90.11	90.009	6,814.65	2,167.27	1,734.99	2,130.22	0.00	0.00	0.00
9,700.00	90.11	90.009	6,814.47	2,167.25	1,834.99	2,228.23	0.00	0.00	0.00

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison Unit 631H - Slot 04
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 631H	**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	90.11	90.010	6,814.28	2,167.24	1,934.99	2,326.25	0.00	0.00	0.00
9,900.00	90.11	90.010	6,814.10	2,167.22	2,034.99	2,424.26	0.00	0.00	0.00
10,000.00	90.11	90.011	6,813.91	2,167.20	2,134.99	2,522.27	0.00	0.00	0.00
10,100.00	90.11	90.011	6,813.72	2,167.18	2,234.99	2,620.28	0.00	0.00	0.00
10,200.00	90.11	90.011	6,813.54	2,167.16	2,334.99	2,718.29	0.00	0.00	0.00
10,300.00	90.11	90.012	6,813.35	2,167.14	2,434.99	2,816.30	0.00	0.00	0.00
10,400.00	90.11	90.012	6,813.17	2,167.12	2,534.99	2,914.31	0.00	0.00	0.00
10,500.00	90.11	90.013	6,812.98	2,167.10	2,634.99	3,012.32	0.00	0.00	0.00
10,600.00	90.11	90.013	6,812.79	2,167.08	2,734.99	3,110.33	0.00	0.00	0.00
10,700.00	90.11	90.014	6,812.61	2,167.05	2,834.99	3,208.34	0.00	0.00	0.00
10,800.00	90.11	90.014	6,812.42	2,167.03	2,934.99	3,306.35	0.00	0.00	0.00
10,900.00	90.11	90.015	6,812.24	2,167.00	3,034.99	3,404.36	0.00	0.00	0.00
11,000.00	90.11	90.015	6,812.05	2,166.98	3,134.99	3,502.37	0.00	0.00	0.00
11,100.00	90.11	90.016	6,811.86	2,166.95	3,234.99	3,600.38	0.00	0.00	0.00
11,200.00	90.11	90.016	6,811.68	2,166.92	3,334.99	3,698.39	0.00	0.00	0.00
11,300.00	90.11	90.017	6,811.49	2,166.90	3,434.99	3,796.40	0.00	0.00	0.00
11,400.00	90.11	90.017	6,811.31	2,166.87	3,534.99	3,894.41	0.00	0.00	0.00
11,500.00	90.11	90.018	6,811.12	2,166.84	3,634.99	3,992.42	0.00	0.00	0.00
11,600.00	90.11	90.018	6,810.93	2,166.80	3,734.99	4,090.43	0.00	0.00	0.00
11,700.00	90.11	90.019	6,810.75	2,166.77	3,834.99	4,188.44	0.00	0.00	0.00
11,800.00	90.11	90.019	6,810.56	2,166.74	3,934.99	4,286.45	0.00	0.00	0.00
11,900.00	90.11	90.019	6,810.38	2,166.71	4,034.99	4,384.45	0.00	0.00	0.00
12,000.00	90.11	90.020	6,810.19	2,166.67	4,134.99	4,482.46	0.00	0.00	0.00
12,100.00	90.11	90.020	6,810.01	2,166.64	4,234.99	4,580.47	0.00	0.00	0.00
12,200.00	90.11	90.021	6,809.82	2,166.60	4,334.99	4,678.48	0.00	0.00	0.00
12,300.00	90.11	90.021	6,809.63	2,166.56	4,434.99	4,776.49	0.00	0.00	0.00
12,400.00	90.11	90.022	6,809.45	2,166.53	4,534.99	4,874.49	0.00	0.00	0.00
12,500.00	90.11	90.022	6,809.26	2,166.49	4,634.99	4,972.50	0.00	0.00	0.00
12,600.00	90.11	90.023	6,809.08	2,166.45	4,734.99	5,070.51	0.00	0.00	0.00
12,700.00	90.11	90.023	6,808.89	2,166.41	4,834.99	5,168.52	0.00	0.00	0.00
12,800.00	90.11	90.024	6,808.70	2,166.37	4,934.99	5,266.52	0.00	0.00	0.00
12,900.00	90.11	90.024	6,808.52	2,166.32	5,034.99	5,364.53	0.00	0.00	0.00
13,000.00	90.11	90.025	6,808.33	2,166.28	5,134.99	5,462.53	0.00	0.00	0.00
13,100.00	90.11	90.025	6,808.15	2,166.24	5,234.99	5,560.54	0.00	0.00	0.00
13,200.00	90.11	90.026	6,807.96	2,166.19	5,334.99	5,658.55	0.00	0.00	0.00
13,300.00	90.11	90.026	6,807.77	2,166.15	5,434.99	5,756.55	0.00	0.00	0.00
13,400.00	90.11	90.027	6,807.59	2,166.10	5,534.99	5,854.56	0.00	0.00	0.00
13,500.00	90.11	90.027	6,807.40	2,166.06	5,634.99	5,952.56	0.00	0.00	0.00
13,600.00	90.11	90.027	6,807.22	2,166.01	5,734.99	6,050.57	0.00	0.00	0.00
13,700.00	90.11	90.028	6,807.03	2,165.96	5,834.99	6,148.58	0.00	0.00	0.00
13,800.00	90.11	90.028	6,806.84	2,165.91	5,934.99	6,246.58	0.00	0.00	0.00
13,900.00	90.11	90.029	6,806.66	2,165.86	6,034.99	6,344.59	0.00	0.00	0.00
14,000.00	90.11	90.029	6,806.47	2,165.81	6,134.99	6,442.59	0.00	0.00	0.00
14,100.00	90.11	90.030	6,806.29	2,165.76	6,234.99	6,540.60	0.00	0.00	0.00
14,200.00	90.11	90.030	6,806.10	2,165.71	6,334.99	6,638.60	0.00	0.00	0.00
14,300.00	90.11	90.031	6,805.91	2,165.65	6,434.99	6,736.60	0.00	0.00	0.00
14,400.00	90.11	90.031	6,805.73	2,165.60	6,534.99	6,834.61	0.00	0.00	0.00
14,500.00	90.11	90.032	6,805.54	2,165.54	6,634.99	6,932.61	0.00	0.00	0.00
14,600.00	90.11	90.032	6,805.36	2,165.49	6,734.99	7,030.62	0.00	0.00	0.00
14,700.00	90.11	90.033	6,805.17	2,165.43	6,834.99	7,128.62	0.00	0.00	0.00
14,800.00	90.11	90.033	6,804.99	2,165.37	6,934.99	7,226.62	0.00	0.00	0.00
14,900.00	90.11	90.034	6,804.80	2,165.32	7,034.99	7,324.63	0.00	0.00	0.00

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison Unit 631H - Slot 04
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 631H	**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	90.11	90.034	6,804.61	2,165.26	7,134.99	7,422.63	0.00	0.00	0.00
15,100.00	90.11	90.035	6,804.43	2,165.20	7,234.99	7,520.63	0.00	0.00	0.00
15,200.00	90.11	90.035	6,804.24	2,165.14	7,334.98	7,618.64	0.00	0.00	0.00
15,300.00	90.11	90.035	6,804.06	2,165.08	7,434.98	7,716.64	0.00	0.00	0.00
15,400.00	90.11	90.036	6,803.87	2,165.01	7,534.98	7,814.64	0.00	0.00	0.00
15,500.00	90.11	90.036	6,803.68	2,164.95	7,634.98	7,912.64	0.00	0.00	0.00
15,600.00	90.11	90.037	6,803.50	2,164.89	7,734.98	8,010.65	0.00	0.00	0.00
15,700.00	90.11	90.037	6,803.31	2,164.82	7,834.98	8,108.65	0.00	0.00	0.00
15,800.00	90.11	90.038	6,803.13	2,164.75	7,934.98	8,206.65	0.00	0.00	0.00
15,900.00	90.11	90.038	6,802.94	2,164.69	8,034.98	8,304.65	0.00	0.00	0.00
16,000.00	90.11	90.039	6,802.75	2,164.62	8,134.98	8,402.65	0.00	0.00	0.00
16,100.00	90.11	90.039	6,802.57	2,164.55	8,234.98	8,500.65	0.00	0.00	0.00
16,200.00	90.11	90.040	6,802.38	2,164.48	8,334.98	8,598.66	0.00	0.00	0.00
16,300.00	90.11	90.040	6,802.20	2,164.41	8,434.98	8,696.66	0.00	0.00	0.00
16,400.00	90.11	90.041	6,802.01	2,164.34	8,534.98	8,794.66	0.00	0.00	0.00
16,500.00	90.11	90.041	6,801.82	2,164.27	8,634.98	8,892.66	0.00	0.00	0.00
16,600.00	90.11	90.042	6,801.64	2,164.20	8,734.98	8,990.66	0.00	0.00	0.00
16,700.00	90.11	90.042	6,801.45	2,164.13	8,834.98	9,088.66	0.00	0.00	0.00
16,800.00	90.11	90.043	6,801.27	2,164.05	8,934.98	9,186.66	0.00	0.00	0.00
16,900.00	90.11	90.043	6,801.08	2,163.98	9,034.98	9,284.66	0.00	0.00	0.00
17,000.00	90.11	90.043	6,800.89	2,163.90	9,134.98	9,382.66	0.00	0.00	0.00
17,100.00	90.11	90.044	6,800.71	2,163.83	9,234.98	9,480.66	0.00	0.00	0.00
17,200.00	90.11	90.044	6,800.52	2,163.75	9,334.98	9,578.66	0.00	0.00	0.00
17,300.00	90.11	90.045	6,800.34	2,163.67	9,434.98	9,676.66	0.00	0.00	0.00
17,400.00	90.11	90.045	6,800.15	2,163.59	9,534.98	9,774.66	0.00	0.00	0.00
17,500.00	90.11	90.046	6,799.97	2,163.51	9,634.98	9,872.66	0.00	0.00	0.00
17,600.00	90.11	90.046	6,799.78	2,163.43	9,734.98	9,970.66	0.00	0.00	0.00
17,700.00	90.11	90.047	6,799.59	2,163.35	9,834.98	10,068.66	0.00	0.00	0.00
17,800.00	90.11	90.047	6,799.41	2,163.27	9,934.98	10,166.65	0.00	0.00	0.00
17,900.00	90.11	90.048	6,799.22	2,163.19	10,034.98	10,264.65	0.00	0.00	0.00
18,000.00	90.11	90.048	6,799.04	2,163.10	10,134.98	10,362.65	0.00	0.00	0.00
18,100.00	90.11	90.049	6,798.85	2,163.02	10,234.98	10,460.65	0.00	0.00	0.00
18,200.00	90.11	90.049	6,798.66	2,162.93	10,334.98	10,558.65	0.00	0.00	0.00
18,300.00	90.11	90.050	6,798.48	2,162.85	10,434.98	10,656.64	0.00	0.00	0.00
18,400.00	90.11	90.050	6,798.29	2,162.76	10,534.98	10,754.64	0.00	0.00	0.00
18,500.00	90.11	90.051	6,798.11	2,162.67	10,634.98	10,852.64	0.00	0.00	0.00
18,556.94	90.11	90.051	6,798.00	2,162.62	10,691.92	10,908.44	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 631H BHL - plan hits target center - Point	0.00	0.000	6,798.00	2,162.62	10,691.92	2,185,139.30	601,988.60	37.004622	-107.484055
AU 631H LP Rev2 - plan hits target center - Point	0.00	0.000	6,818.00	2,167.41	-65.65	2,185,108.76	591,231.10	37.004640	-107.520896

Hilcorp Energy Company

Lonestar Consulting, LLC

Planning Report

LONESTAR CONSULTING

Database:	edm	**Local Co-ordinate Reference:**	Well Allison Unit 631H - Slot 04
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 631H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #2		

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
6,832.35	6,200.00	9 5/8"	9.62	12.25
18,556.94	6,798.00	5 1/2"	5.50	8.50

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,173.84	2,084.00	OJO ALAMO (SS)		0.00	0.000
2,254.91	2,150.00	KIRTLAND (SHALE + coal)		0.00	0.000
2,784.35	2,581.00	FRUITLAND (shale + COAL)		0.00	0.000
3,237.63	2,950.00	PICTURED CLIFFS (ss)		0.00	0.000
3,872.70	3,467.00	LEWIS SHALE		0.00	0.000
5,528.30	4,900.00	CLIFFHOUSE		0.00	0.000
5,906.29	5,274.00	MENEFEE		0.00	0.000
6,087.35	5,455.00	POINT LOOKOUT		0.00	0.000
6,606.35	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 1111 Travis Street Houston, TX 77002	372171
	Action Number: 498077
	Action Type: [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