

Well Name: ALLISON 601 FEDERAL COM	Well Location: T32N / R07W / SEC 12 / SESW / 36.989676 / -107.521045	County or Parish/State: SAN JUAN / NM
Well Number: 604H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078483A	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: HILCORP ENERGY COMPANY	

Notice of Intent

Sundry ID: 2847186

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 04/15/2025	Time Sundry Submitted: 05:41
Date proposed operation will begin: 04/21/2025	

Procedure Description: Hilcorp Energy Company requests to revise the drilling plans on the above listed well. The wellheads will be located at 20' spacing rather than the 25' listed in the original APD, and the laterals will be extended. Please see the attached revised plat, technical plans, and directional plans.

NOI Attachments

Procedure Description

- ALLISON_601_FEDERAL_COM_604H_REVISED_PLAT_20250415054054.PDF
- Allison_601_Federal_Com_604H____Drilling_Technical_Plan____Rev_1_20250415054054.pdf
- Allison_601_Federal_Com_604H_Plan_7_20250415054054.pdf

Well Name: ALLISON 601 FEDERAL COM	Well Location: T32N / R07W / SEC 12 / SESW / 36.989676 / -107.521045	County or Parish/State: SAN JUAN / NM
Well Number: 604H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078483A	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: HILCORP ENERGY COMPANY	

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: AMANDA WALKER	Signed on: APR 15, 2025 05:41 AM
Name: HILCORP ENERGY COMPANY	
Title: Operations/Regulatory Technician	
Street Address: 1111 TRAVIS ST	
City: HOUSTON	State: TX
Phone: (346) 237-2177	
Email address: MWALKER@HILCORP.COM	

Field

Representative Name:		
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		

BLM Point of Contact

BLM POC Name: DAVE J MANKIEWICZ	BLM POC Title: AFM-Minerals
BLM POC Phone: 5055647761	BLM POC Email Address: DMANKIEW@BLM.GOV
Disposition: Approved	Disposition Date: 04/17/2025
Signature: Dave J Mankiewicz	

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.	
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	
8. Well Name and No.	
9. API Well No.	
10. Field and Pool or Exploratory Area	
11. Country or Parish, State	

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other	
2. Name of Operator	
3a. Address	3b. Phone No. (include area code)
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)	

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: SESW / 279 FSL / 1755 FWL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.989676 / LONG: -107.521045 (TVD: 0 feet, MD: 0 feet)
PPP: NESE / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 10 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet)
PPP: LOT 6 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 14 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet)
PPP: NENE / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 15 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet)
PPP: LOT 6 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 11 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet)
PPP: SENW / 1618 FNL / 1652 FWL / TWSP: 32N / RANGE: 07W / SECTION: 13 / LAT: 36.984516 / LONG: -107.521469 (TVD: 7128 feet, MD: 19808 feet)
PPP: LOT 3 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 14 / LAT: 36.98462 / LONG: -107.527152 (TVD: 7128 feet, MD: 19808 feet)
PPP: LOT 2 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 13 / LAT: 36.98462 / LONG: -107.527152 (TVD: 7128 feet, MD: 19808 feet)
BHL: LOT 4 / 1955 FNL / 229 FWL / TWSP: 32N / RANGE: 07W / SECTION: 15 / LAT: 36.984832 / LONG: -107.562762 (TVD: 7128 feet, MD: 19808 feet)

CONFIDENTIAL

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 97232	Pool Name BASIN MANCOS
Property Code	Property Name ALLISON 601 FEDERAL COM	Well Number 604H
OGRID No. 372171	Operator Name HILCORP ENERGY COMPANY	Ground Level Elevation 6563'
Surface Owner: ☐ State ☒ Fee ☐ Tribal ☐ Federal		Mineral Owner: ☒ State ☒ Fee ☐ Tribal ☒ Federal

Surface Location

UL N	Section 12	Township 32N	Range 7W	Lot	Feet from N/S Line 227' SOUTH	Feet from E/W Line 1784' WEST	Latitude 36.989524 °N	Longitude -107.520952 °W	County SAN JUAN
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Bottom Hole Location

UL G	Section 16	Township 32N	Range 7W	Lot	Feet from N/S Line 2022' NORTH	Feet from E/W Line 2345' EAST	Latitude 36.984829 °N	Longitude -107.571575 °W	County SAN JUAN
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Penetrated Spacing Unit		Infill or Defining Well Infill	Defining Well API Allison 601 Federal Com 603H API: TBD	Overlapping Spacing Unit	Consolidation Code
Dedicated Acres 2032.09	N/2 SE/4, SE/4 SE/4, Lots 7-11 S10 SW/4, W/2 SE/4, Lots 6-7 S11 E/2 SW/4, Lots 6-7 S12 + E/2 NW/4, Lots 1-2 S13 NW/4 NE/4, NW/4, Lots 1-3 S14 NE/4 NE/4, Lots 1-7 S15 + NE/4 S16			☐ Yes ☒ No	Com
Order Numbers			Well setbacks are under Common Ownership		☒ Yes ☐ No

Kick Off Point (KOP)

UL N	Section 12	Township 32N	Range 7W	Lot	Feet from N/S Line 227' SOUTH	Feet from E/W Line 1784' WEST	Latitude 36.989524 °N	Longitude -107.520952 °W	County SAN JUAN
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First Take Point (FTP)

UL F	Section 13	Township 32N	Range 7W	Lot	Feet from N/S Line 1480' NORTH	Feet from E/W Line 2569' WEST	Latitude 36.984516 °N	Longitude 107.518331 °W	County SAN JUAN
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Last Take Point (LTP)

UL G	Section 16	Township 32N	Range 7W	Lot	Feet from N/S Line 2022' NORTH	Feet from E/W Line 2305' EAST	Latitude 36.984827 °N	Longitude -107.571437 °W	County SAN JUAN
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical ☐ Directional	Ground Floor Elevation
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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.  3/20/2025 Signature 3/20/2025 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 15269 Date of Survey MARCH 12, 2024
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SURFACE LOCATION (A)
227' FSL 1784' FWL
SECTION 12, T32N, R7W
LAT 36.989519 °N
LONG -107.520345 °W
DATUM: NAD1927

LAT 36.989524 °N
LONG -107.520952 °W
DATUM: NAD1983



FIRST TAKE POINT (C)
1480' FNL 2569' FWL
SECTION 13, T32N, R7W
LAT 36.984511°N
LONG -107.517724°W
DATUM: NAD1927

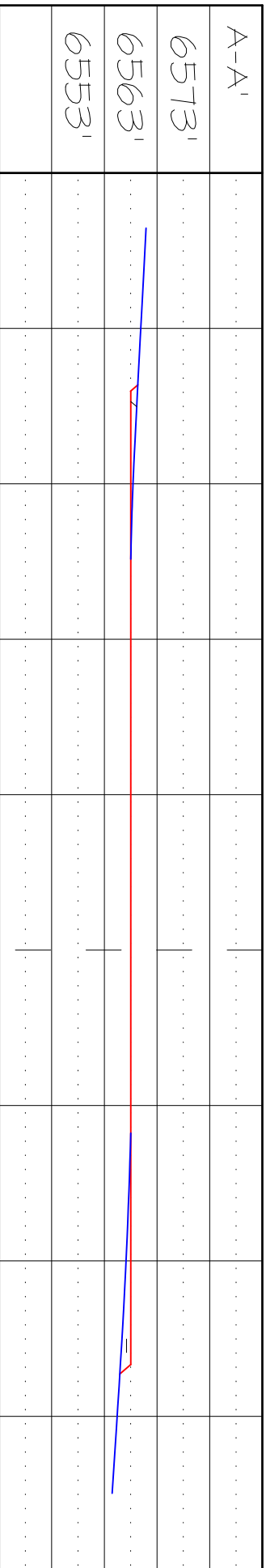
LAT 36.984516°N
LONG -107.518331°W
DATUM: NAD1983

HILL CORP ENERGY COMPANY ALLISON 601 FEDERAL COM #604H 227' FSL & 1784' FWL, SECTION 12, T32N, R7W, NMPM SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6563'

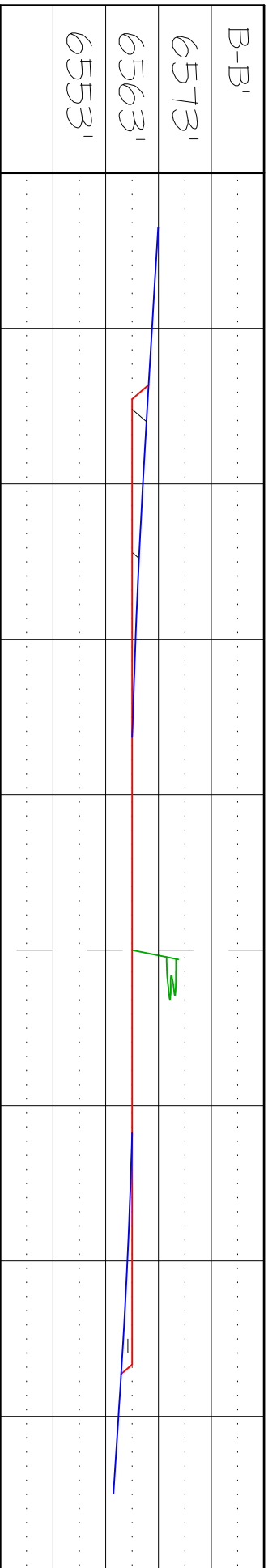
HORIZONTAL SCALE 1"=110'

C/L

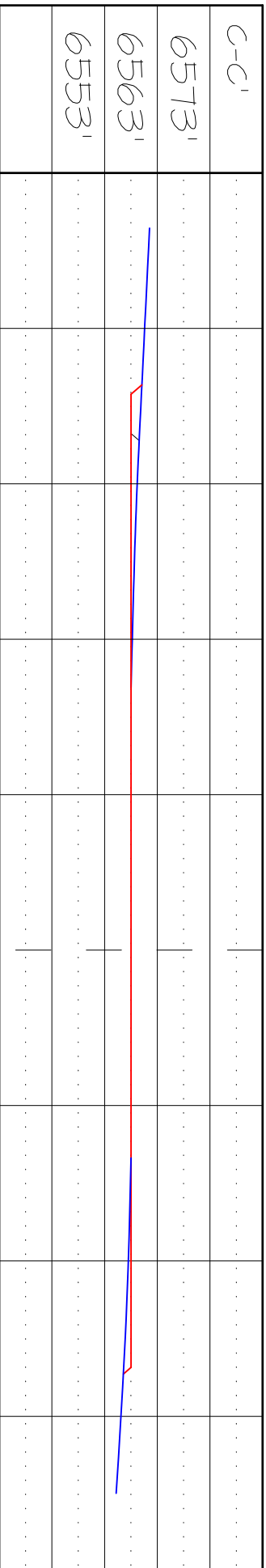
VERTICAL SCALE 1"=30'



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.

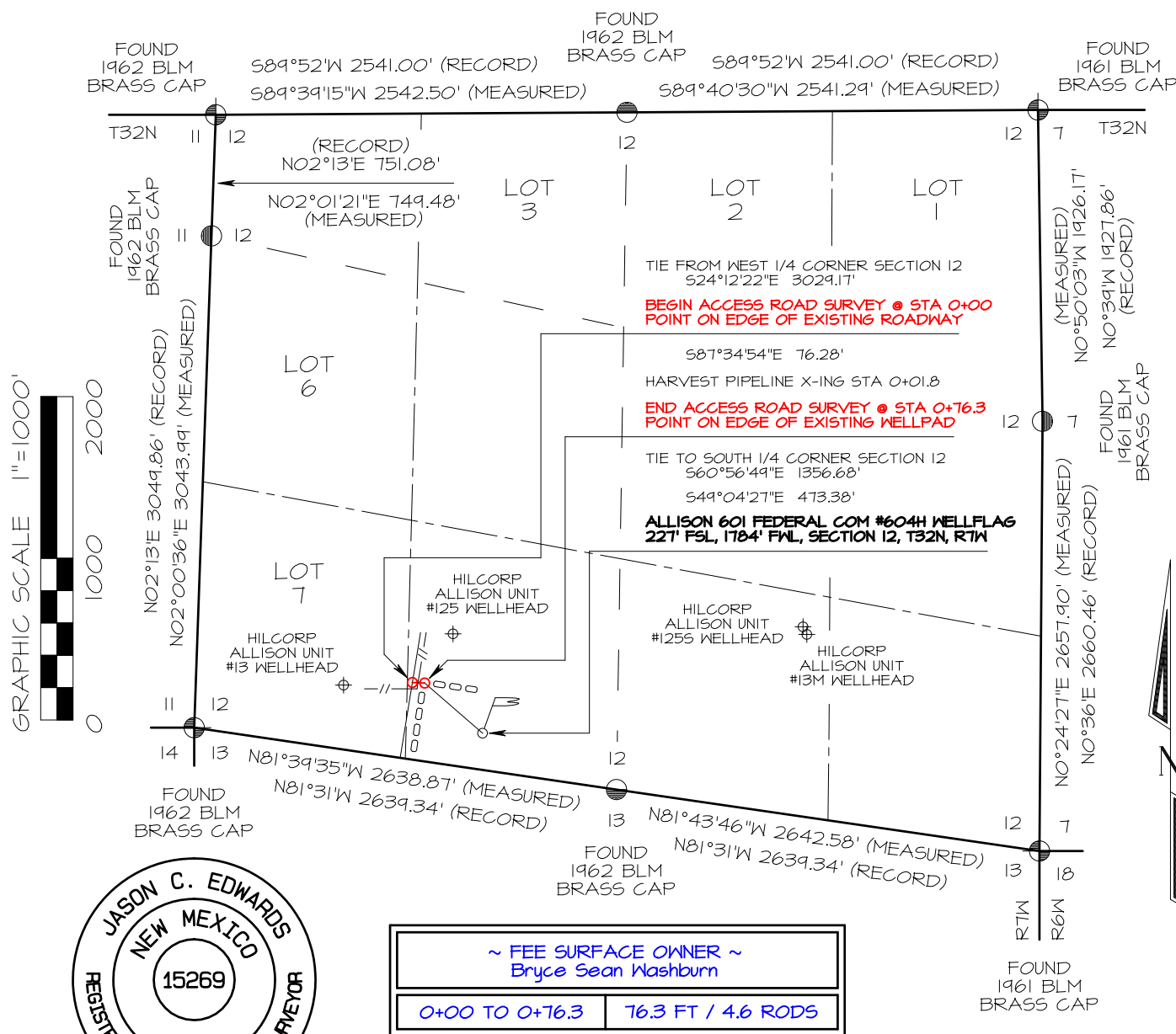
HILCORP ENERGY COMPANY ALLISON 601 FEDERAL COM #604H PROPOSED ACCESS ROAD SURVEY LOCATED IN SE/4 SW/4 OF SECTION 12, T32N, R7W, NMPM SAN JUAN COUNTY, NEW MEXICO

PLAT NOTE

BEFORE ANY CONSTRUCTION BEGINS,
CONTRACTOR IS ADVISED TO CALL
ONE-CALL FOR LOCATION OF ANY
MARKED OR UNMARKED PIPELINES OR
CABLES IN THE AREA OF THE PROJECT

BASIS OF BEARING

REAL-TIME KINEMATIC GPS SURVEY
SOLUTION OBTAINED FROM SATELLITES
TRACKED ON NOVEMBER 23, 2022 FROM
A REFERENCE STATION POSITIONED IN
SW/4 SW/4 OF SECTION 12, T32N, R7W



I, Jason C. Edwards, a registered Professional Surveyor under the laws of the State of New Mexico, hereby certify that this plat was prepared from field notes of an actual survey meeting the minimum requirements of the standards for easement surveys and is true and correct to the best of my knowledge and belief.

JASON C. EDWARDS

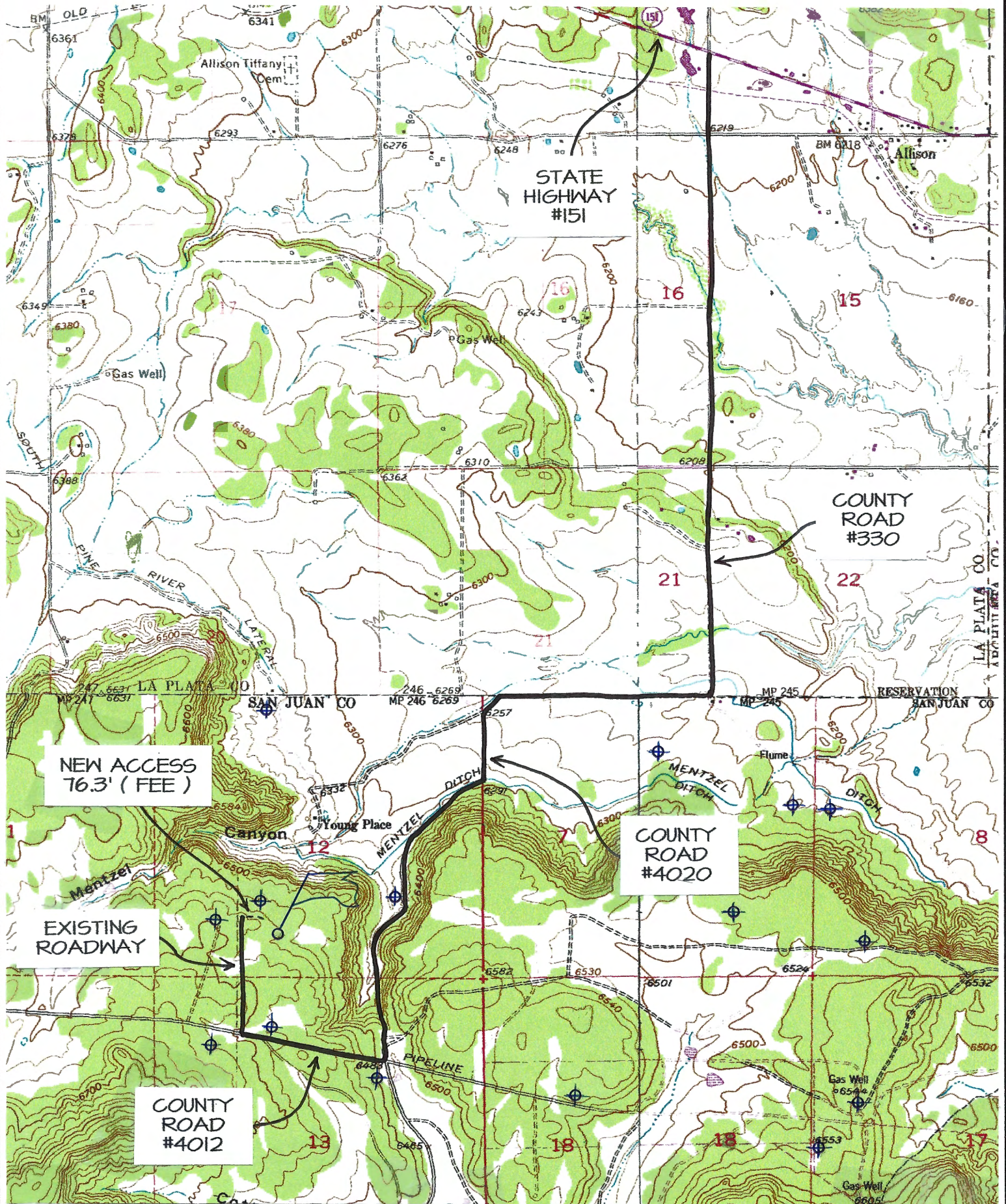
Jason C. Edwards, P.L.S.
New Mexico L.S. #15269

Date: March 19, 2025

Prepared for: HILCORP ENERGY COMPANY P.O. BOX #61529 HOUSTON, TX 77208-1529		Land Surveyor: Jason C. Edwards	CHECKED BY: JCE
		Mailing Address: Post Office Box 6612 Farmington, NM 87499 Business Address: 111 East Pinon Street Farmington, NM 87402 (505) 486-1695 (Office) ncsurveys@comcast.net	DRAWN BY: EDO
SURVEYS, INC.		SHEET 6 OF 8 FILENAME: 32T12AFI	

HILCORP ENERGY COMPANY ALLISON 601 FEDERAL COM #604H

227' FSL & 1784' 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 601 Federal Com #604H
227' FSL & 1784' FWL, Section 12, T32N, R7W, N.M.P.M., San Juan County, NM

Latitude 36.989524°N Longitude -107.520952°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 1.9 miles to County Road #4012:

Go Right (Westerly) on County Road #4012 for 0.5 miles to fork in roadway:

Go Right (Northerly) exiting County Road #4012 for 0.3 miles to Hilcorp Energy Company Allison 601 Federal Com #604H existing location on right-hand side of existing roadway.

San Juan County, NM

Allison 601 Federal Com 604H



Technical Drilling Plan (Rev. 1)

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:	March 12, 2025	Pool:	Basin Mancos
Well Name:	Allison 601 Federal Com 604H	Ground Elevation (ft. MSL):	6,563'
Surface Hole Location:	36.989519° N, 107.520345° W	Total Measured Depth (ft.)	23,525'
Bottom Hole Location:	36.984824° N, 107.570965° W	County, State:	San Juan County, NM

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)	Remarks
Ojo Alamo	2,300	Possible Water
Kirtland	2,400	Gas & Water
Fruitland	2,814	Gas & Water
Pictured Cliffs	3,198	Possible Gas
Lewis Shale	3,708	None
Cliffhouse	5,137	Possible Gas & Water
Menefee	5,498	None
Point Lookout	5,704	Gas
Mancos	6,226	Gas
Mancos A	6,741	Gas
Mancos B	6,917	Gas
Mancos C	7,109	Gas

San Juan County, NM

Allison 601 Federal Com 604H



3. Pressure Control Equipment

A. BOP Equipment

See Appendix A for BOP equipment and choke manifold diagram.

- BOP equipment will be nipped 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.**

San Juan County, NM

Allison 601 Federal Com 604H



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'	350'/350'	1,130 psi	2,730 psi	514 klbs
Intermediate	12-1/4"	9-5/8"-43.5#-L80 (or equiv)-LTC/BTC	0'	6,879'/6,326'	3,810 psi	6,330 psi	737 klbs
Production	8-1/2"	5-1/2"-20.0#-P110 (or equiv)-LTC/BTC	0'	23,525'/7,127'	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	16.7	8.8	51.8	55.2
Intermediate	1.7	1.2	4.1	3.3
Production	2.8	3.0	1.7	1.4

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:

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

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

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

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.

San Juan County, NM

Allison 601 Federal Com 604H

**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 3 rd 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	350'	Lead	486 ft ³	352	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	6,879'	Lead	1,947 ft ³	380	25%	ASTM Type II 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	736 ft ³	342	25%	ASTM Type II 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	23,525'	Lead	653 ft ³	416	25%	ASTM Type II 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), KCI (3.0%), R-3 (0.55%), STATIC FREE (0.01 lb/sk), XCem-311 (0.3%)						
		Tail	4,609 ft ³	3,114	25%	Class G Yield: 1.48 ft ³ /sk	14.0	7,500'
		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 nipped 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).

San Juan County, NM

Allison 601 Federal Com 604H



7. Drilling Fluids Program

A. Proposed Drilling Fluids Program:

Proposed Drilling Fluids Program					
Interval	Fluid Type	Density (ppg)	Fluid Loss (mL/30 min)	Invert Ratio (%Diesel / %Brine)	Depth (ft. MD)
Surface	Water/Gel	8.3 – 9.2	NC	N/A	0' – 350'
Intermediate	LSND / Gel	8.4 – 10.0	<6	N/A	350' – 6,879'
Production	Oil Base Mud	10.0 – 12.0	6 – 8	70/30 – 75/25	6,879' – 23,525'

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 CaCl₂ 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: 2,224 bbls (12,487 ft³).

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.

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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.

San Juan County, NM

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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.

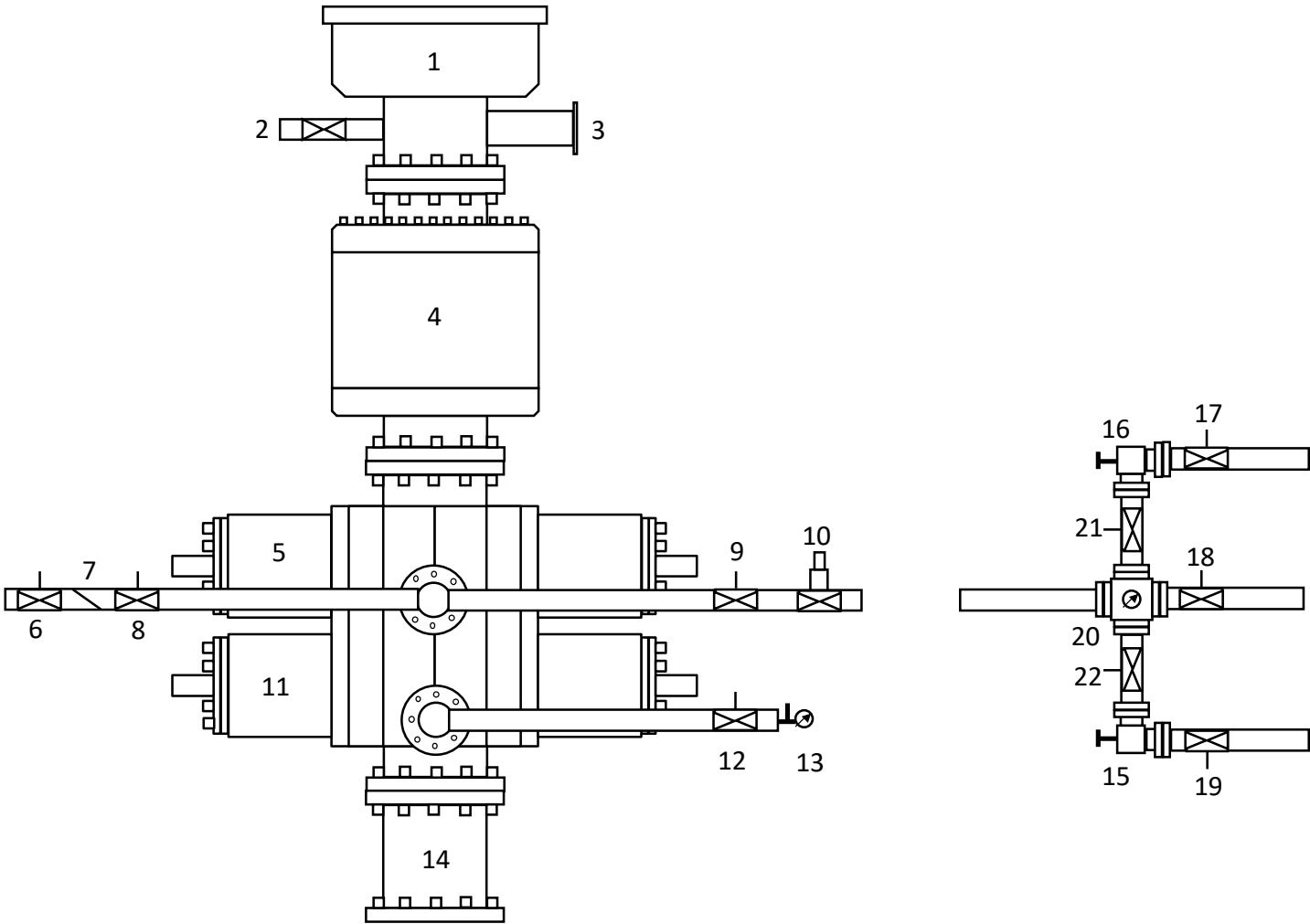
San Juan County, NM

Allison 601 Federal Com 604H



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	Hydraulically 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



Allison 601 Federal Com 604H
OH
Plan #7

GL 6563' & RKB 17' @ 6580.00ft

Northing	Easting	Latitude	Longitude
2179604.18	591410.03	36.989519	-107.520345

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
07 System Datum: Mean Sea Level



Plan: Plan #7 (Allison 601 Federal Com 604H/OH)

Created By: Janie Collins

Date: 14:42, March 06 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	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	Start Build 2.50
1702.61	30.07	143.482	1648.18	-247.81	183.50	2.50	-153.89	Start 3297.28 hold at 1702.61 MD
4999.89	30.07	143.482	4501.82	-1575.38	1166.50	0.00	-978.32	Start Drop -2.50
6202.50	0.00	0.000	5650.00	-1823.19	1350.00	2.50	-1132.21	Start 854.50 hold at 6202.50 MD
7057.00	0.00	0.000	6504.50	-1823.19	1350.00	0.00	-1132.21	Start DLS 9.84 TFO 270.00
7970.49	89.85	270.000	7087.00	-1823.19	769.00	9.84	-555.04	Start DLS 0.01 TFO 89.95
23525.17	89.85	270.869	7127.00	-1705.25	-14785.03	0.01	14883.04	TD at 23525.17

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
AFC601 604H LP Rev3	7087.00	-1823.19	769.00	2177783.52	592185.02	36.984511	-107.517712
AFC601 604H BHL Rev3	7127.00	-1705.25	-14785.03	2177850.34	576630.72	36.984824	-107.570965



Azimuths to True North
Magnetic North: 8.60°

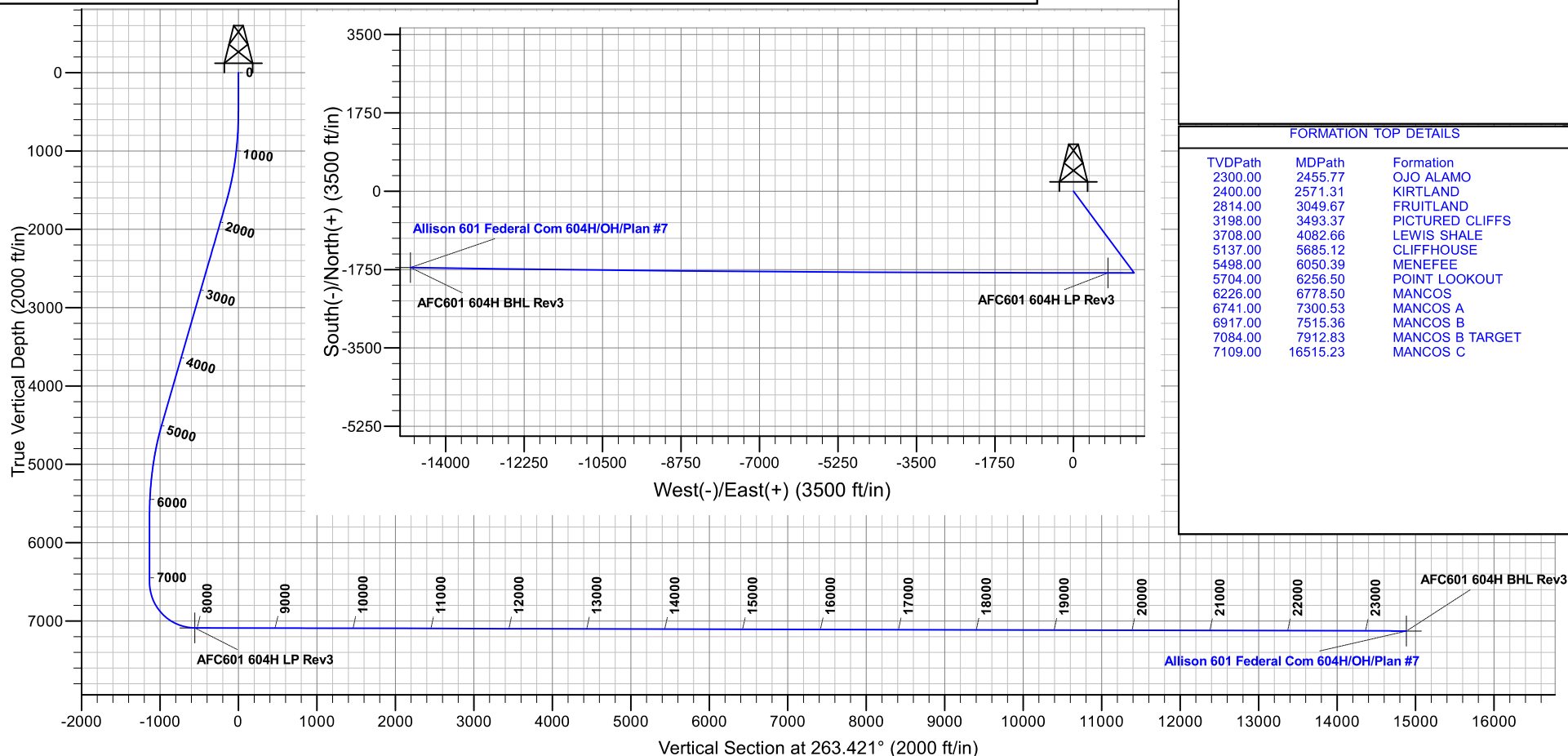
Magnetic Field
Strength: 49371.9nT
Dip Angle: 63.33°
Date: 3/26/2024
Model: HDGM2024

CASING DETAILS

No casing data is available

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
2300.00	2455.77	OJO ALAMO
2400.00	2571.31	KIRTLAND
2814.00	3049.67	FRUITLAND
3198.00	3493.37	PICTURED CLIFFS
3708.00	4082.66	LEWIS SHALE
5137.00	5685.12	CLIFFHOUSE
5498.00	6050.39	MENEFEE
5704.00	6256.50	POINT LOOKOUT
6226.00	6778.50	MANCOS
6741.00	7300.53	MANCOS A
6917.00	7515.36	MANCOS B
7084.00	7912.83	MANCOS B TARGET
7109.00	16515.23	MANCOS C





Hilcorp Energy - San Juan Basin

San Juan, NM NAD27

Allison Unit 601 / 701 Pad

Allison 601 Federal Com 604H - Slot 07

OH

Plan: Plan #7

Standard Planning Report

06 March, 2025





Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

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 601 / 701 Pad			
Site Position:		Northing:	2,179,722.92 usft	Latitude: 36.989845
From:	Lat/Long	Easting:	591,427.46 usft	Longitude: -107.520284
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	

Well	Allison 601 Federal Com 604H - Slot 07			
Well Position	+N/-S	0.00 ft	Northing:	2,179,604.18 usft
	+E/-W	0.00 ft	Easting:	591,410.04 usft
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft
Grid Convergence:		0.19 °	Ground Level:	6,563.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	3/26/2024	8.60	63.33	49,371.90000000

Design	Plan #7			
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	263.421

Plan Survey Tool Program	Date	3/6/2025		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	23,525.06 Plan #7 (OH)	MWD+HDGM	
			OWSG MWD + HDGM	

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	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,702.61	30.07	143.482	1,648.18	-247.81	183.50	2.50	2.50	0.00	143.48	
4,999.89	30.07	143.482	4,501.82	-1,575.38	1,166.50	0.00	0.00	0.00	0.00	
6,202.50	0.00	0.000	5,650.00	-1,823.19	1,350.00	2.50	-2.50	0.00	180.00	
7,057.00	0.00	0.000	6,504.50	-1,823.19	1,350.00	0.00	0.00	0.00	0.00	
7,970.49	89.85	270.000	7,087.00	-1,823.19	769.00	9.84	9.84	-9.85	270.00	AFC601 604H LP Re
23,525.17	89.85	270.869	7,127.00	-1,705.25	-14,785.03	0.01	0.00	0.01	89.95	AFC601 604H BHL R



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

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	2.50	143.482	599.97	-1.75	1.30	-1.09	2.50	2.50	0.00
700.00	5.00	143.482	699.75	-7.01	5.19	-4.35	2.50	2.50	0.00
800.00	7.50	143.482	799.14	-15.76	11.67	-9.79	2.50	2.50	0.00
900.00	10.00	143.482	897.97	-27.98	20.72	-17.38	2.50	2.50	0.00
1,000.00	12.50	143.482	996.04	-43.66	32.33	-27.11	2.50	2.50	0.00
1,100.00	15.00	143.482	1,093.17	-62.76	46.47	-38.97	2.50	2.50	0.00
1,200.00	17.50	143.482	1,189.17	-85.25	63.12	-52.94	2.50	2.50	0.00
1,300.00	20.00	143.482	1,283.85	-111.08	82.25	-68.98	2.50	2.50	0.00
1,400.00	22.50	143.482	1,377.05	-140.20	103.81	-87.07	2.50	2.50	0.00
1,500.00	25.00	143.482	1,468.57	-172.57	127.78	-107.17	2.50	2.50	0.00
1,600.00	27.50	143.482	1,558.25	-208.11	154.10	-129.24	2.50	2.50	0.00
1,700.00	30.00	143.482	1,645.92	-246.76	182.72	-153.24	2.50	2.50	0.00
1,702.61	30.07	143.482	1,648.18	-247.81	183.50	-153.89	2.50	2.50	0.00
1,800.00	30.07	143.482	1,732.46	-287.02	212.53	-178.24	0.00	0.00	0.00
1,900.00	30.07	143.482	1,819.01	-327.29	242.34	-203.25	0.00	0.00	0.00
2,000.00	30.07	143.482	1,905.55	-367.55	272.16	-228.25	0.00	0.00	0.00
2,100.00	30.07	143.482	1,992.10	-407.81	301.97	-253.25	0.00	0.00	0.00
2,200.00	30.07	143.482	2,078.64	-448.07	331.78	-278.26	0.00	0.00	0.00
2,300.00	30.07	143.482	2,165.19	-488.34	361.59	-303.26	0.00	0.00	0.00
2,400.00	30.07	143.482	2,251.74	-528.60	391.41	-328.26	0.00	0.00	0.00
2,500.00	30.07	143.482	2,338.28	-568.86	421.22	-353.27	0.00	0.00	0.00
2,600.00	30.07	143.482	2,424.83	-609.12	451.03	-378.27	0.00	0.00	0.00
2,700.00	30.07	143.482	2,511.37	-649.39	480.84	-403.27	0.00	0.00	0.00
2,800.00	30.07	143.482	2,597.92	-689.65	510.66	-428.28	0.00	0.00	0.00
2,900.00	30.07	143.482	2,684.46	-729.91	540.47	-453.28	0.00	0.00	0.00
3,000.00	30.07	143.482	2,771.01	-770.17	570.28	-478.28	0.00	0.00	0.00
3,100.00	30.07	143.482	2,857.55	-810.44	600.10	-503.29	0.00	0.00	0.00
3,200.00	30.07	143.482	2,944.10	-850.70	629.91	-528.29	0.00	0.00	0.00
3,300.00	30.07	143.482	3,030.65	-890.96	659.72	-553.29	0.00	0.00	0.00
3,400.00	30.07	143.482	3,117.19	-931.22	689.53	-578.30	0.00	0.00	0.00
3,500.00	30.07	143.482	3,203.74	-971.49	719.35	-603.30	0.00	0.00	0.00
3,600.00	30.07	143.482	3,290.28	-1,011.75	749.16	-628.30	0.00	0.00	0.00
3,700.00	30.07	143.482	3,376.83	-1,052.01	778.97	-653.31	0.00	0.00	0.00
3,800.00	30.07	143.482	3,463.37	-1,092.27	808.78	-678.31	0.00	0.00	0.00
3,900.00	30.07	143.482	3,549.92	-1,132.54	838.60	-703.31	0.00	0.00	0.00
4,000.00	30.07	143.482	3,636.46	-1,172.80	868.41	-728.32	0.00	0.00	0.00
4,100.00	30.07	143.482	3,723.01	-1,213.06	898.22	-753.32	0.00	0.00	0.00
4,200.00	30.07	143.482	3,809.56	-1,253.32	928.04	-778.32	0.00	0.00	0.00
4,300.00	30.07	143.482	3,896.10	-1,293.59	957.85	-803.33	0.00	0.00	0.00
4,400.00	30.07	143.482	3,982.65	-1,333.85	987.66	-828.33	0.00	0.00	0.00
4,500.00	30.07	143.482	4,069.19	-1,374.11	1,017.47	-853.33	0.00	0.00	0.00
4,600.00	30.07	143.482	4,155.74	-1,414.37	1,047.29	-878.34	0.00	0.00	0.00
4,700.00	30.07	143.482	4,242.28	-1,454.63	1,077.10	-903.34	0.00	0.00	0.00
4,800.00	30.07	143.482	4,328.83	-1,494.90	1,106.91	-928.34	0.00	0.00	0.00
4,900.00	30.07	143.482	4,415.37	-1,535.16	1,136.73	-953.35	0.00	0.00	0.00
4,999.89	30.07	143.482	4,501.82	-1,575.38	1,166.50	-978.32	0.00	0.00	0.00
5,000.00	30.07	143.482	4,501.92	-1,575.42	1,166.54	-978.35	0.00	0.00	0.00
5,100.00	27.56	143.482	4,589.53	-1,614.15	1,195.22	-1,002.40	2.50	-2.50	0.00



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

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)	
5,200.00	25.06	143.482	4,679.17	-1,649.77	1,221.59	-1,024.52	2.50	-2.50	0.00	
5,300.00	22.56	143.482	4,770.65	-1,682.22	1,245.62	-1,044.67	2.50	-2.50	0.00	
5,400.00	20.06	143.482	4,863.80	-1,711.42	1,267.24	-1,062.81	2.50	-2.50	0.00	
5,500.00	17.56	143.482	4,958.45	-1,737.34	1,286.43	-1,078.90	2.50	-2.50	0.00	
5,600.00	15.06	143.482	5,054.42	-1,759.91	1,303.14	-1,092.92	2.50	-2.50	0.00	
5,700.00	12.56	143.482	5,151.52	-1,779.09	1,317.35	-1,104.83	2.50	-2.50	0.00	
5,800.00	10.06	143.482	5,249.57	-1,794.86	1,329.02	-1,114.62	2.50	-2.50	0.00	
5,900.00	7.56	143.482	5,348.38	-1,807.17	1,338.14	-1,122.27	2.50	-2.50	0.00	
6,000.00	5.06	143.482	5,447.76	-1,816.01	1,344.68	-1,127.75	2.50	-2.50	0.00	
6,100.00	2.56	143.482	5,547.53	-1,821.35	1,348.64	-1,131.07	2.50	-2.50	0.00	
6,200.00	0.06	143.482	5,647.50	-1,823.19	1,350.00	-1,132.21	2.50	-2.50	0.00	
6,202.50	0.00	0.000	5,650.00	-1,823.19	1,350.00	-1,132.21	2.50	-2.50	0.00	
6,300.00	0.00	0.000	5,747.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
6,400.00	0.00	0.000	5,847.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
6,500.00	0.00	0.000	5,947.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
6,600.00	0.00	0.000	6,047.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
6,700.00	0.00	0.000	6,147.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
6,800.00	0.00	0.000	6,247.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
6,900.00	0.00	0.000	6,347.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
7,000.00	0.00	0.000	6,447.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
7,057.00	0.00	0.000	6,504.50	-1,823.19	1,350.00	-1,132.21	0.00	0.00	0.00	
7,100.00	4.23	270.000	6,547.46	-1,823.19	1,348.41	-1,130.64	9.84	9.84	0.00	
7,200.00	14.07	270.000	6,646.07	-1,823.19	1,332.54	-1,114.86	9.84	9.84	0.00	
7,300.00	23.90	270.000	6,740.51	-1,823.19	1,300.04	-1,082.59	9.84	9.84	0.00	
7,400.00	33.74	270.000	6,828.02	-1,823.19	1,251.90	-1,034.76	9.84	9.84	0.00	
7,500.00	43.57	270.000	6,906.02	-1,823.19	1,189.51	-972.78	9.84	9.84	0.00	
7,600.00	53.41	270.000	6,972.21	-1,823.19	1,114.72	-898.48	9.84	9.84	0.00	
7,700.00	63.25	270.000	7,024.65	-1,823.19	1,029.71	-814.04	9.84	9.84	0.00	
7,800.00	73.08	270.000	7,061.79	-1,823.19	937.00	-721.93	9.84	9.84	0.00	
7,900.00	82.92	270.000	7,082.56	-1,823.19	839.31	-624.88	9.84	9.84	0.00	
7,970.49	89.85	270.000	7,087.00	-1,823.19	769.00	-555.04	9.84	9.84	0.00	
8,000.00	89.85	270.001	7,087.08	-1,823.19	739.49	-525.72	0.01	0.00	0.01	
8,100.00	89.85	270.007	7,087.33	-1,823.19	639.49	-426.38	0.01	0.00	0.01	
8,200.00	89.85	270.012	7,087.59	-1,823.17	539.49	-327.04	0.01	0.00	0.01	
8,300.00	89.85	270.018	7,087.85	-1,823.14	439.49	-227.71	0.01	0.00	0.01	
8,400.00	89.85	270.024	7,088.11	-1,823.11	339.49	-128.37	0.01	0.00	0.01	
8,500.00	89.85	270.029	7,088.37	-1,823.06	239.49	-29.03	0.01	0.00	0.01	
8,600.00	89.85	270.035	7,088.62	-1,823.01	139.49	70.30	0.01	0.00	0.01	
8,700.00	89.85	270.040	7,088.88	-1,822.94	39.49	169.64	0.01	0.00	0.01	
8,800.00	89.85	270.046	7,089.14	-1,822.87	-60.51	268.97	0.01	0.00	0.01	
8,900.00	89.85	270.052	7,089.40	-1,822.78	-160.51	368.30	0.01	0.00	0.01	
9,000.00	89.85	270.057	7,089.65	-1,822.69	-260.51	467.63	0.01	0.00	0.01	
9,100.00	89.85	270.063	7,089.91	-1,822.58	-360.51	566.96	0.01	0.00	0.01	
9,200.00	89.85	270.068	7,090.17	-1,822.47	-460.51	666.29	0.01	0.00	0.01	
9,300.00	89.85	270.074	7,090.43	-1,822.34	-560.51	765.61	0.01	0.00	0.01	
9,400.00	89.85	270.079	7,090.69	-1,822.21	-660.51	864.94	0.01	0.00	0.01	
9,500.00	89.85	270.085	7,090.94	-1,822.07	-760.51	964.26	0.01	0.00	0.01	
9,600.00	89.85	270.091	7,091.20	-1,821.91	-860.50	1,063.59	0.01	0.00	0.01	
9,700.00	89.85	270.096	7,091.46	-1,821.75	-960.50	1,162.91	0.01	0.00	0.01	
9,800.00	89.85	270.102	7,091.72	-1,821.58	-1,060.50	1,262.23	0.01	0.00	0.01	
9,900.00	89.85	270.107	7,091.97	-1,821.39	-1,160.50	1,361.55	0.01	0.00	0.01	
10,000.00	89.85	270.113	7,092.23	-1,821.20	-1,260.50	1,460.87	0.01	0.00	0.01	
10,100.00	89.85	270.119	7,092.49	-1,821.00	-1,360.50	1,560.19	0.01	0.00	0.01	
10,200.00	89.85	270.124	7,092.75	-1,820.79	-1,460.50	1,659.50	0.01	0.00	0.01	



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

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)
10,300.00	89.85	270.130	7,093.00	-1,820.56	-1,560.50	1,758.82	0.01	0.00	0.01
10,400.00	89.85	270.135	7,093.26	-1,820.33	-1,660.50	1,858.13	0.01	0.00	0.01
10,500.00	89.85	270.141	7,093.52	-1,820.09	-1,760.50	1,957.45	0.01	0.00	0.01
10,600.00	89.85	270.147	7,093.78	-1,819.84	-1,860.50	2,056.76	0.01	0.00	0.01
10,700.00	89.85	270.152	7,094.03	-1,819.58	-1,960.50	2,156.07	0.01	0.00	0.01
10,800.00	89.85	270.158	7,094.29	-1,819.31	-2,060.50	2,255.38	0.01	0.00	0.01
10,900.00	89.85	270.163	7,094.55	-1,819.03	-2,160.50	2,354.69	0.01	0.00	0.01
11,000.00	89.85	270.169	7,094.81	-1,818.74	-2,260.50	2,454.00	0.01	0.00	0.01
11,100.00	89.85	270.175	7,095.07	-1,818.44	-2,360.50	2,553.30	0.01	0.00	0.01
11,200.00	89.85	270.180	7,095.32	-1,818.13	-2,460.49	2,652.61	0.01	0.00	0.01
11,300.00	89.85	270.186	7,095.58	-1,817.81	-2,560.49	2,751.91	0.01	0.00	0.01
11,400.00	89.85	270.191	7,095.84	-1,817.48	-2,660.49	2,851.21	0.01	0.00	0.01
11,500.00	89.85	270.197	7,096.10	-1,817.14	-2,760.49	2,950.52	0.01	0.00	0.01
11,600.00	89.85	270.202	7,096.35	-1,816.79	-2,860.49	3,049.82	0.01	0.00	0.01
11,700.00	89.85	270.208	7,096.61	-1,816.44	-2,960.49	3,149.12	0.01	0.00	0.01
11,800.00	89.85	270.214	7,096.87	-1,816.07	-3,060.49	3,248.41	0.01	0.00	0.01
11,900.00	89.85	270.219	7,097.13	-1,815.69	-3,160.49	3,347.71	0.01	0.00	0.01
12,000.00	89.85	270.225	7,097.38	-1,815.30	-3,260.49	3,447.01	0.01	0.00	0.01
12,100.00	89.85	270.230	7,097.64	-1,814.91	-3,360.49	3,546.30	0.01	0.00	0.01
12,200.00	89.85	270.236	7,097.90	-1,814.50	-3,460.48	3,645.60	0.01	0.00	0.01
12,300.00	89.85	270.242	7,098.16	-1,814.08	-3,560.48	3,744.89	0.01	0.00	0.01
12,400.00	89.85	270.247	7,098.41	-1,813.66	-3,660.48	3,844.18	0.01	0.00	0.01
12,500.00	89.85	270.253	7,098.67	-1,813.22	-3,760.48	3,943.47	0.01	0.00	0.01
12,600.00	89.85	270.258	7,098.93	-1,812.77	-3,860.48	4,042.76	0.01	0.00	0.01
12,700.00	89.85	270.264	7,099.19	-1,812.32	-3,960.48	4,142.05	0.01	0.00	0.01
12,800.00	89.85	270.270	7,099.44	-1,811.85	-4,060.48	4,241.33	0.01	0.00	0.01
12,900.00	89.85	270.275	7,099.70	-1,811.38	-4,160.48	4,340.62	0.01	0.00	0.01
13,000.00	89.85	270.281	7,099.96	-1,810.89	-4,260.47	4,439.90	0.01	0.00	0.01
13,100.00	89.85	270.286	7,100.21	-1,810.40	-4,360.47	4,539.19	0.01	0.00	0.01
13,200.00	89.85	270.292	7,100.47	-1,809.89	-4,460.47	4,638.47	0.01	0.00	0.01
13,300.00	89.85	270.298	7,100.73	-1,809.38	-4,560.47	4,737.75	0.01	0.00	0.01
13,400.00	89.85	270.303	7,100.99	-1,808.85	-4,660.47	4,837.03	0.01	0.00	0.01
13,500.00	89.85	270.309	7,101.24	-1,808.32	-4,760.47	4,936.31	0.01	0.00	0.01
13,600.00	89.85	270.314	7,101.50	-1,807.77	-4,860.46	5,035.58	0.01	0.00	0.01
13,700.00	89.85	270.320	7,101.76	-1,807.22	-4,960.46	5,134.86	0.01	0.00	0.01
13,800.00	89.85	270.326	7,102.02	-1,806.66	-5,060.46	5,234.14	0.01	0.00	0.01
13,900.00	89.85	270.331	7,102.27	-1,806.08	-5,160.46	5,333.41	0.01	0.00	0.01
14,000.00	89.85	270.337	7,102.53	-1,805.50	-5,260.46	5,432.68	0.01	0.00	0.01
14,100.00	89.85	270.342	7,102.79	-1,804.91	-5,360.45	5,531.95	0.01	0.00	0.01
14,200.00	89.85	270.348	7,103.05	-1,804.31	-5,460.45	5,631.22	0.01	0.00	0.01
14,300.00	89.85	270.353	7,103.30	-1,803.69	-5,560.45	5,730.49	0.01	0.00	0.01
14,400.00	89.85	270.359	7,103.56	-1,803.07	-5,660.45	5,829.76	0.01	0.00	0.01
14,500.00	89.85	270.365	7,103.82	-1,802.44	-5,760.45	5,929.03	0.01	0.00	0.01
14,600.00	89.85	270.370	7,104.07	-1,801.80	-5,860.44	6,028.29	0.01	0.00	0.01
14,700.00	89.85	270.376	7,104.33	-1,801.15	-5,960.44	6,127.56	0.01	0.00	0.01
14,800.00	89.85	270.381	7,104.59	-1,800.49	-6,060.44	6,226.82	0.01	0.00	0.01
14,900.00	89.85	270.387	7,104.85	-1,799.82	-6,160.44	6,326.08	0.01	0.00	0.01
15,000.00	89.85	270.393	7,105.10	-1,799.14	-6,260.43	6,425.34	0.01	0.00	0.01
15,100.00	89.85	270.398	7,105.36	-1,798.45	-6,360.43	6,524.60	0.01	0.00	0.01
15,200.00	89.85	270.404	7,105.62	-1,797.75	-6,460.43	6,623.86	0.01	0.00	0.01
15,300.00	89.85	270.409	7,105.88	-1,797.04	-6,560.42	6,723.12	0.01	0.00	0.01
15,400.00	89.85	270.415	7,106.13	-1,796.32	-6,660.42	6,822.37	0.01	0.00	0.01
15,500.00	89.85	270.421	7,106.39	-1,795.59	-6,760.42	6,921.63	0.01	0.00	0.01
15,600.00	89.85	270.426	7,106.65	-1,794.85	-6,860.42	7,020.88	0.01	0.00	0.01



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

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)
15,700.00	89.85	270.432	7,106.90	-1,794.10	-6,960.41	7,120.14	0.01	0.00	0.01
15,800.00	89.85	270.437	7,107.16	-1,793.34	-7,060.41	7,219.39	0.01	0.00	0.01
15,900.00	89.85	270.443	7,107.42	-1,792.57	-7,160.41	7,318.64	0.01	0.00	0.01
16,000.00	89.85	270.449	7,107.68	-1,791.80	-7,260.40	7,417.89	0.01	0.00	0.01
16,100.00	89.85	270.454	7,107.93	-1,791.01	-7,360.40	7,517.13	0.01	0.00	0.01
16,200.00	89.85	270.460	7,108.19	-1,790.21	-7,460.40	7,616.38	0.01	0.00	0.01
16,300.00	89.85	270.465	7,108.45	-1,789.40	-7,560.39	7,715.63	0.01	0.00	0.01
16,400.00	89.85	270.471	7,108.70	-1,788.59	-7,660.39	7,814.87	0.01	0.00	0.01
16,500.00	89.85	270.476	7,108.96	-1,787.76	-7,760.38	7,914.11	0.01	0.00	0.01
16,600.00	89.85	270.482	7,109.22	-1,786.92	-7,860.38	8,013.36	0.01	0.00	0.01
16,700.00	89.85	270.488	7,109.48	-1,786.08	-7,960.38	8,112.60	0.01	0.00	0.01
16,800.00	89.85	270.493	7,109.73	-1,785.22	-8,060.37	8,211.84	0.01	0.00	0.01
16,900.00	89.85	270.499	7,109.99	-1,784.36	-8,160.37	8,311.07	0.01	0.00	0.01
17,000.00	89.85	270.504	7,110.25	-1,783.48	-8,260.36	8,410.31	0.01	0.00	0.01
17,100.00	89.85	270.510	7,110.50	-1,782.59	-8,360.36	8,509.55	0.01	0.00	0.01
17,200.00	89.85	270.516	7,110.76	-1,781.70	-8,460.36	8,608.78	0.01	0.00	0.01
17,300.00	89.85	270.521	7,111.02	-1,780.79	-8,560.35	8,708.01	0.01	0.00	0.01
17,400.00	89.85	270.527	7,111.27	-1,779.88	-8,660.35	8,807.25	0.01	0.00	0.01
17,500.00	89.85	270.532	7,111.53	-1,778.96	-8,760.34	8,906.48	0.01	0.00	0.01
17,600.00	89.85	270.538	7,111.79	-1,778.02	-8,860.34	9,005.71	0.01	0.00	0.01
17,700.00	89.85	270.544	7,112.05	-1,777.08	-8,960.33	9,104.94	0.01	0.00	0.01
17,800.00	89.85	270.549	7,112.30	-1,776.12	-9,060.33	9,204.16	0.01	0.00	0.01
17,900.00	89.85	270.555	7,112.56	-1,775.16	-9,160.32	9,303.39	0.01	0.00	0.01
18,000.00	89.85	270.560	7,112.82	-1,774.19	-9,260.32	9,402.61	0.01	0.00	0.01
18,100.00	89.85	270.566	7,113.07	-1,773.20	-9,360.31	9,501.84	0.01	0.00	0.01
18,200.00	89.85	270.572	7,113.33	-1,772.21	-9,460.31	9,601.06	0.01	0.00	0.01
18,300.00	89.85	270.577	7,113.59	-1,771.21	-9,560.30	9,700.28	0.01	0.00	0.01
18,400.00	89.85	270.583	7,113.84	-1,770.20	-9,660.30	9,799.50	0.01	0.00	0.01
18,500.00	89.85	270.588	7,114.10	-1,769.18	-9,760.29	9,898.72	0.01	0.00	0.01
18,600.00	89.85	270.594	7,114.36	-1,768.14	-9,860.29	9,997.94	0.01	0.00	0.01
18,700.00	89.85	270.600	7,114.61	-1,767.10	-9,960.28	10,097.15	0.01	0.00	0.01
18,800.00	89.85	270.605	7,114.87	-1,766.05	-10,060.27	10,196.37	0.01	0.00	0.01
18,900.00	89.85	270.611	7,115.13	-1,764.99	-10,160.27	10,295.58	0.01	0.00	0.01
19,000.00	89.85	270.616	7,115.39	-1,763.92	-10,260.26	10,394.80	0.01	0.00	0.01
19,100.00	89.85	270.622	7,115.64	-1,762.84	-10,360.26	10,494.01	0.01	0.00	0.01
19,200.00	89.85	270.627	7,115.90	-1,761.75	-10,460.25	10,593.22	0.01	0.00	0.01
19,300.00	89.85	270.633	7,116.16	-1,760.65	-10,560.24	10,692.43	0.01	0.00	0.01
19,400.00	89.85	270.639	7,116.41	-1,759.54	-10,660.24	10,791.63	0.01	0.00	0.01
19,500.00	89.85	270.644	7,116.67	-1,758.42	-10,760.23	10,890.84	0.01	0.00	0.01
19,600.00	89.85	270.650	7,116.93	-1,757.29	-10,860.22	10,990.05	0.01	0.00	0.01
19,700.00	89.85	270.655	7,117.18	-1,756.15	-10,960.22	11,089.25	0.01	0.00	0.01
19,800.00	89.85	270.661	7,117.44	-1,755.00	-11,060.21	11,188.45	0.01	0.00	0.01
19,900.00	89.85	270.667	7,117.70	-1,753.84	-11,160.20	11,287.66	0.01	0.00	0.01
20,000.00	89.85	270.672	7,117.95	-1,752.68	-11,260.20	11,386.86	0.01	0.00	0.01
20,100.00	89.85	270.678	7,118.21	-1,751.50	-11,360.19	11,486.06	0.01	0.00	0.01
20,200.00	89.85	270.683	7,118.47	-1,750.31	-11,460.18	11,585.25	0.01	0.00	0.01
20,300.00	89.85	270.689	7,118.72	-1,749.11	-11,560.17	11,684.45	0.01	0.00	0.01
20,400.00	89.85	270.695	7,118.98	-1,747.90	-11,660.17	11,783.65	0.01	0.00	0.01
20,500.00	89.85	270.700	7,119.24	-1,746.69	-11,760.16	11,882.84	0.01	0.00	0.01
20,600.00	89.85	270.706	7,119.49	-1,745.46	-11,860.15	11,982.03	0.01	0.00	0.01
20,700.00	89.85	270.711	7,119.75	-1,744.22	-11,960.14	12,081.22	0.01	0.00	0.01
20,800.00	89.85	270.717	7,120.01	-1,742.98	-12,060.13	12,180.42	0.01	0.00	0.01
20,900.00	89.85	270.723	7,120.26	-1,741.72	-12,160.13	12,279.60	0.01	0.00	0.01
21,000.00	89.85	270.728	7,120.52	-1,740.45	-12,260.12	12,378.79	0.01	0.00	0.01



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

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)
21,100.00	89.85	270.734	7,120.78	-1,739.18	-12,360.11	12,477.98	0.01	0.00	0.01
21,200.00	89.85	270.739	7,121.03	-1,737.89	-12,460.10	12,577.17	0.01	0.00	0.01
21,300.00	89.85	270.745	7,121.29	-1,736.60	-12,560.09	12,676.35	0.01	0.00	0.01
21,400.00	89.85	270.750	7,121.55	-1,735.29	-12,660.08	12,775.53	0.01	0.00	0.01
21,500.00	89.85	270.756	7,121.80	-1,733.98	-12,760.07	12,874.71	0.01	0.00	0.01
21,600.00	89.85	270.762	7,122.06	-1,732.65	-12,860.06	12,973.90	0.01	0.00	0.01
21,700.00	89.85	270.767	7,122.32	-1,731.32	-12,960.06	13,073.07	0.01	0.00	0.01
21,800.00	89.85	270.773	7,122.57	-1,729.98	-13,060.05	13,172.25	0.01	0.00	0.01
21,900.00	89.85	270.778	7,122.83	-1,728.62	-13,160.04	13,271.43	0.01	0.00	0.01
22,000.00	89.85	270.784	7,123.09	-1,727.26	-13,260.03	13,370.61	0.01	0.00	0.01
22,100.00	89.85	270.790	7,123.34	-1,725.89	-13,360.02	13,469.78	0.01	0.00	0.01
22,200.00	89.85	270.795	7,123.60	-1,724.50	-13,460.01	13,568.95	0.01	0.00	0.01
22,300.00	89.85	270.801	7,123.86	-1,723.11	-13,560.00	13,668.12	0.01	0.00	0.01
22,400.00	89.85	270.806	7,124.11	-1,721.71	-13,659.99	13,767.30	0.01	0.00	0.01
22,500.00	89.85	270.812	7,124.37	-1,720.29	-13,759.98	13,866.46	0.01	0.00	0.01
22,600.00	89.85	270.818	7,124.63	-1,718.87	-13,859.97	13,965.63	0.01	0.00	0.01
22,700.00	89.85	270.823	7,124.88	-1,717.44	-13,959.96	14,064.80	0.01	0.00	0.01
22,800.00	89.85	270.829	7,125.14	-1,716.00	-14,059.95	14,163.97	0.01	0.00	0.01
22,900.00	89.85	270.834	7,125.40	-1,714.55	-14,159.93	14,263.13	0.01	0.00	0.01
23,000.00	89.85	270.840	7,125.65	-1,713.09	-14,259.92	14,362.29	0.01	0.00	0.01
23,100.00	89.85	270.846	7,125.91	-1,711.62	-14,359.91	14,461.45	0.01	0.00	0.01
23,200.00	89.85	270.851	7,126.17	-1,710.14	-14,459.90	14,560.62	0.01	0.00	0.01
23,300.00	89.85	270.857	7,126.42	-1,708.65	-14,559.89	14,659.77	0.01	0.00	0.01
23,400.00	89.85	270.862	7,126.68	-1,707.14	-14,659.88	14,758.93	0.01	0.00	0.01
23,500.00	89.85	270.868	7,126.94	-1,705.64	-14,759.87	14,858.09	0.01	0.00	0.01
23,525.17	89.85	270.869	7,127.00	-1,705.25	-14,785.03	14,883.04	0.01	0.00	0.01

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
AFC601 604H LP Rev3	0.00	0.000	7,087.00	-1,823.19	769.00	2,177,783.52	592,185.02	36.984511	-107.517712
- plan hits target center									
- Point									
AFC601 604H BHL Rev:	0.00	0.000	7,127.00	-1,705.25	-14,785.03	2,177,850.34	576,630.72	36.984824	-107.570966
- plan hits target center									
- Point									



Lonestar Consulting, LLC
Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 604H - Slot 07
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 604H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,455.77	2,300.00	OJO ALAMO		0.00	0.000	
2,571.31	2,400.00	KIRTLAND		0.00	0.000	
3,049.67	2,814.00	FRUITLAND		0.00	0.000	
3,493.37	3,198.00	PICTURED CLIFFS		0.00	0.000	
4,082.66	3,708.00	LEWIS SHALE		0.00	0.000	
5,685.12	5,137.00	CLIFFHOUSE		0.00	0.000	
6,050.39	5,498.00	MENEFEE		0.00	0.000	
6,256.50	5,704.00	POINT LOOKOUT		0.00	0.000	
6,778.50	6,226.00	MANCOS		0.00	0.000	
7,300.53	6,741.00	MANCOS A		0.00	0.000	
7,515.36	6,917.00	MANCOS B		0.00	0.000	
7,912.83	7,084.00	MANCOS B TARGET		0.00	0.000	
16,515.23	7,109.00	MANCOS C		0.00	0.000	

Sante Fe Main Office
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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

Action 464594

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 464594
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	5/19/2025