Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☐ DRILL ☐ REENTER

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

1c. Type of Completion: ☐ Hydraulic Fracturing ☐ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.

2. Name of Operator

9. API Well No.
30-045-38449

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface
At proposed prod. zone

11. Sec., T. R. M. or Blk. and Survey or Area

14. Distance in miles and direction from nearest town or post office*

12. County or Parish

13. State

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be requested by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
Title		
Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Title	Office	

Application approval 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.
Conditions of approval, if any, are attached.

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.

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 04/14/2025

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Approval Date: 04/14/2025

Additional Operator Remarks

Location of Well

0. SHL: SESW / 227 FSL / 1931 FWL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.989463 / LONG: -107.520453 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 17 / LAT: 36.98594 / LONG: -107.490995 (TVD: 7131 feet, MD: 20265 feet)

PPP: LOT 1 / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 18 / LAT: 36.98594 / LONG: -107.490995 (TVD: 7131 feet, MD: 20265 feet)

PPP: NWNE / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 13 / LAT: 36.986026 / LONG: -107.509234 (TVD: 7131 feet, MD: 20265 feet)

PPP: NWNE / 866 FNL / 2276 FEL / TWSP: 32N / RANGE: 07W / SECTION: 13 / LAT: 36.986043 / LONG: -107.516976 (TVD: 7131 feet, MD: 20265 feet)

PPP: NENW / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 17 / LAT: 36.98594 / LONG: -107.490995 (TVD: 7131 feet, MD: 20265 feet)

BHL: NENE / 756 FNL / 247 FEL / TWSP: 32N / RANGE: 06W / SECTION: 17 / LAT: 36.985896 / LONG: -107.473558 (TVD: 7131 feet, MD: 20265 feet)

BLM Point of Contact

Name: CHRISTOPHER P WENMAN
Title: Natural Resource Specialist
Phone: (505) 564-7727
Email: cwenman@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

Conditions of Approval

Operator:	Hilcorp Energy Company
Well Names:	601H, 602H, 603H, 604H, 605H, 606H, 607H, and 608H
Legal Location:	Sec 12 T32N R7W, San Juan County, NM
NEPA Log Number:	DOI-BLM-NM-F010-2025-0015-EA
Onsite Date:	May 22, 2024
Lease Number:	NMNM078372X

The following conditions of approval will apply to Allison 601/602/701 Federal Com Natural Gas Wells Project, and other associated facilities, unless a particular Surface Managing Agency or private surface owner has supplied to Bureau of Land Management and the operator a contradictory environmental stipulation. The failure of the operator to comply with these requirements may result in an assessment or civil penalties pursuant to 43 CFR 3163.1 or 3163.2.

1. **Disclaimers:** BLM's approval of the APD does not relieve the lessee and operator from obtaining any other authorizations that may be required by the BIA, Navajo Tribe, State, or other jurisdictional entities.

2. **Copy of Plans:** A complete copy of the APD package, including Surface Use Plan of Operations, Bare Soil Reclamation Plan, Plan of Development (if required), Conditions of Approval, Cultural Resource Record of Review, Cultural Resources Compliance Form (if required), and Project Stipulations (if required) shall be at the project area at all times and available to all persons.

3. **Surface Owner:** An agreement between the operator and fee land owner will take precedence over BLM surface stipulations unless (In reference to 43 CFR Part 3160) 1) BLM determines that the operator's actions will affect adjacent Federal or Indian surface, or 2) the operator does not maintain well area and lease premises in a workmanlike manner with due regard for safety, conservation and appearance, or 3) no such agreement exists, or 4) in the event of well abandonment, minimal Federal restoration requirements will be required. If surface owner changes any stipulations in the conditions of approval, the operator will contact the BLM authorized officer before implementing surface owner stipulation.

4. **Review of NEPA documents:** It is the responsibility of the operator to follow all the design features, best management practices, and mitigation measures as contained in the Environmental Assessment DOI-BLM-NM-F010-2025-0015-EA, which contains additional design features and best management practices that must be followed. Copies of the EA, Decision Record, and Finding of No Significant Impact may be obtained from the BLM FFO public room, or online at: https://eplanning.blm.gov/eplanning-ui/admin/project/2036104/510

5. **Best Management Practices (BMPs):** Farmington Field Office established environmental Best Management Practices (BMP's) will be followed during construction and reclamation of well site pads, access roads, pipeline ties, facility placement or any other surface disturbing activity associated with this project. Bureau wide standard BMP's are found in the Gold Book, Fourth Edition-Revised 2007. Farmington Field Office BMP's are integrated into the Environmental Assessment, Surface Use Plan of Operations, Bare Soil Reclamation Plan, and COAs.

Construction, Production, Facilities, Reclamation & Maintenance

6. **Construction & Reclamation Notification:** The operator or their contractor will contact the Bureau of Land Management, Farmington Field Office Environmental Protection Staff at (505) 564-7600 or by email, at least 48 hours prior to any construction or reclamation on this project. If applicable, the operator or their contractor will contact the grazing permittee to give notice at least 10 days prior to start of construction operations.

7. **Grazing Permittee Notification and Concerns:** The operator will notify the Middle Mesa AMP grazing lease operator(s) at least ten business days prior to beginning any construction activity to ensure there will be no conflicts between construction activities and livestock grazing operations. The operator is not obligated to cease or delay construction unless directed by the Authorized Officer (AO). Any range improvement (fences, pipelines, ponds, etc.) disturbed by construction activities will be repaired immediately following construction and will be repaired to the condition the improvement was in prior to disturbance. Cattle guards will be installed to replace any livestock fencing or gates removed for road construction.

8. **Cattleguards:** Cattle guard at 107.5142140°W 36.9549077°N shall have grid identification marks welded into them indicating ownership, well name and number associated with the cattle guard, and foundation designs. Construction shall meet the American Association of State Highway and Transportation Officials (AASTHO) load rating H-20, although AASTHO U-80 rated grids shall be required where heavy loads, (exceeding H-20 loading) are anticipated. (See BLM standard drawings for cattle guards). Cattle guard grid width shall not be less than eight feet and length of not less than 14 feet. A wire gate with a minimum width of 16 feet will be provided on one side of the cattle guard.

9. **Production Facilities:** As marked in the APD, design and layout of facilities will be deferred until an onsite with BLM-FFO surface protection staff is conducted to determine the best location. Hilcorp or their contractor will contact the Bureau of Land Management, Farmington Field Office, Surface, and Environmental Protection Staff (505) 564-7600 to schedule a facility layout onsite.

10. **Open Trenches:** No more than ½ mile of trench or the amount of trench that can be worked in one day will be open at any given time.

11. **Staking:** The holder shall place slope stakes, culvert location and grade stakes, and other construction control stakes as deemed necessary by the authorized officer to ensure construction in accordance with the plan of development. If stakes are disturbed, they shall be replaced before proceeding with construction.

12. **Weather:** No construction or routine maintenance activities shall be performed during periods when the soil is too wet to adequately support construction equipment. If such equipment creates ruts more than 6 inches deep, the soil shall be deemed too wet.

13. **Stockpile of Soil:** The top 6 inches of soil material will be stripped and stockpiled in the construction zones around the pad [construction zones may be restricted or deleted to provide resource avoidance]. The stockpiled soil will be free of brush and tree limbs, trunks, and roots. The stockpiled soil material will be spread on the reclaimed portions of the pad [including the reserve pit, cut and fill slopes] prior to re-seeding. Spreading shall not be done when the ground or topsoil is frozen or wet

14. **Painting of Equipment:** Within 90 days of installation, all above ground structures not subject to safety requirements shall be painted by the Holder to blend with the natural color of the landscape. A reflective material may be used to reduce hazards that may occur when such structures are near roads. Otherwise, the paint use shall be a non-glare, non-reflective, non-chalking color of: Federal 595a-34127 (Juniper Green).

15. **Storage Tanks:** All open top permanent production or storage tanks regardless of diameter made of fiberglass, steel, or other material used for the containment of oil, condensate, produced water and or other production waste shall be screened, netted, or otherwise covered to protect migratory birds and other wildlife from access.

16. **Compressors:** Compressor units on this well location not equipped with a drip pan for containment of fluids shall be lined with an impervious material at least 8 mils thick and a 12-inch berm. The compressor will be painted to match the well facilities. Any variance to this will be approved by the Authorized Officer (AO). Noise mitigation may be required at the time of compressor installation.

17. **Berms:** Berms or firewalls will be constructed around all storage facilities sufficient in size to contain the storage capacity of 110% of the largest tank, or 110% of the combined capacity of tanks if a rupture could drain more than one tank. Berm walls will be compacted with appropriate equipment to assure proper construction. Metal containment barriers, used for secondary containment, will be properly installed, per the manufacturer directions.

18. **Layflat Lines:** Layflat lines used for development of the wells may be on the ground for a maximum of 6 months and shall be retrieved immediately following completion operations. If the layflat lines are needed for longer than 6 months a Sundry NOI shall be submitted to the BLM FFO for review and decision that includes a rationale for the time extension.

19. **"Hotwork" and Construction Affecting Fire Safety:** The holder or its contractors will notify the BLM of any fires and comply with all rules and regulations administered by the BLM concerning the use, prevention and suppression of fires on federal lands, including any fire prevention orders that may be in effect at the time of the permitted activity. The holder or its contractors may be held liable for the cost of fire suppression, stabilization and rehabilitation. In the event of a fire, personal safety will be the first priority of the holder or its contractors.

    The holder or its contractors shall:

    1. Operate all internal and external combustion engines (including off-highway vehicles, chainsaws, generators, heavy equipment, etc.) with a qualified spark arrester. Qualified spark arresters are maintained and not modified and meet the Society of Automotive Engineers (SAE) Recommended Practices J335 or J350. Refer to 43 CFR §8343.1.
        a. *Refueling of any combustible engine equipment must be minimum of 3 meters away from any ignition source (open flame, smoking, etc.).*
    2. Maintain and clean all equipment regularly to remove flammable debris buildup and prevent fluid leaks that can lead to ignitions.
    3. Carry at least one shovel or wildland fire hand tool (combi, Pulaski, McLeod) per person working, minimum 5 gallons of water, and a fire extinguisher rated at a minimum as ABC - 10 pound on each piece of equipment and each vehicle.
    4. When conducting "hotwork" such as, but not limited to welding, grinding, cutting, spark-producing work with metal, work that creates hot material or slag; choose an area large enough to contain all hot material that is naturally free of all flammable vegetation or remove the flammable vegetation in a manner compliant with the permitted activity. If adequate clearance cannot be made, wet an area large enough to contain all hot material prior to the activity and periodically throughout the activity to reduce the risk of wildfire ignition. Regardless of clearance, maintain readiness to respond to an ignition at all times. In addition, keep one hand tool per person and at least one fire extinguisher ready, minimum, as specified earlier (#3) during this activity.
    5. Keep apprised of current and forecasted weather at https://www.weather.gov/abq/forecasts-fireweather-links and fire conditions at www.wfas.net and take additional fire precautions when fire danger is rated High or greater. Red Flag Warnings are issued by the National Weather Service when fire conditions are most dangerous, and ignitions escape control quickly. Extra precautions are required during these warnings such as additional water, designate a fire watch/patrol and tools. If work is being conducted in an area that is not clear of vegetation within 50 feet of work area; then, when fire danger is rated High or greater and 1. There is a predicted Red Flag warning for your area or 2. If winds are predicted to be greater than 10 mph, stop all hotwork activities for the day at 10 am.
    6. In the event of an ignition, initiate fire suppression actions in the work area to prevent fire spread to or on federally administered lands. If a fire spreads beyond

the capability of workers with the stipulated tools, all will cease fire suppression action and leave the area immediately via pre-identified escape routes.

7. Call **911** or the **Taos Interagency Fire Dispatch Center (575-758-6208)** immediately of the location and status of any fire.

AND

Notify the respective BLM field office for which the permit or contract was issued immediately of the incident.
Farmington Field Office at 505-564-7600
Taos Field Office at 575-758-8851

20. **Noxious Weeds:** Inventory the proposed site for the presence of noxious and invasive weeds. Noxious weeds are those listed on the New Mexico Noxious Weed List and USDA's Federal Noxious Weed List. The New Mexico Noxious Weed List or USDA's Noxious Weed List can be updated at any time and should be regularly check for any changes. Invasive species may or may not be listed as a noxious weed but have been identified to likely cause economic or environmental harm or harm to human health. The following noxious weeds have been identified as occurring on lands within the boundaries of the Farmington Field Office (FFO). There are numerous invasive species on the FFO such as Russian thistle (*Salsola spp.)* and field bindweed (*Convolvulus arvensis*).

Russian Knapweed (*Centaurea repens*)	Musk Thistle (*Carduss nutans*)
Bull Thistle (*Cirsium vulgare*)	Canada Thistle (*Cirsium arvense*)
Scotch Thistle (*Onopordum acanthium)*	Hoary Cress (*Cardaria draba*)
Perennial Pepperweed (*Lepdium latiofolfium*)	Halogeton (*Halogeton glomeratus*)
Spotted Knapweed (*Centaurea maculosa*)	Dalmation Toadflax (*Linaria genistifolia*)
Yellow Toadflax (*Linaria vulgaris*)	Camelthorn (*Alhagi pseudalhagi*)
African Rue (*Penganum harmala*)	Salt Cedar (*Tamarix spp*.)
Diffuse Knapweed (*Centaurea diffusa*)	Leafy Spurge (*Euphorbia esula*)

a. Identified weeds will be treated prior to new surface disturbance if determined by the FFO Noxious Weed Coordinator. A Pesticide Use Proposal (PUP) must be submitted to and approved by the FFO Noxious Weed Coordinator prior to application of pesticide. The FFO Noxious Weeds Coordinator (505-564-7600) can provide assistance in the development of the PUP.
b. Vehicles and equipment should be inspected and cleaned prior to coming onto the work site. This is especially important on vehicles from out of state or if coming from a weed-infested site.
c. Construction equipment should be inspected and cleaned prior to coming onto the work site. This is especially important on vehicles from out of state or if coming from a weed-infested site.

d. Fill dirt or gravel may be needed for excavation, road construction/repair, or for spill remediation. If fill dirt or gravel will be required, the source shall be noxious weed free and approved by the FFO Noxious Weed Coordinator.
e. The site shall be monitored for the life of the project for the presence of noxious weeds (includes maintenance and construction activities). If weeds are found the FFO Coordinator shall be notified at (505) 564-7600 and provided with a Weed Management Plan and if necessary, a Pesticide Use Proposal (PUP) . The FFO Coordinator can provide assistance developing the Weed Management Plan and/or the Pesticide Use Proposal.
f. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. (Company Name)'s weed-control contractor would contact the BLM-FFO prior to using these chemicals.
g. Noxious/invasive weed treatments must be reported to the FFO Noxious Weed Coordinator. A Pesticide Application Record (PAR) is required to report any mechanical, chemical, biological or cultural treatments used to eradicate, and/or control noxious or invasive species. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Coordinator.

21. **Bare ground vegetation trim-out:** If bare ground vegetation treatment (trim-out) is desired around facility structures, the operator will submit a bare ground/trim-out design included in their Surface Use Plan of Operations (SUPO). The design will address vegetation safety concerns of the operator and BLM while minimizing impacts to interim reclamation efforts. The design must include what structures to be treated and buffer distances of trim-out. Pesticide use for vegetation control around anchor structures is not approved. If pesticides are used for bare ground trim-out, the trim-out will not exceed three feet from the edge of any eligible permanent structure (i.e., well heads, fences, tanks). Additional distance/areas may be requested and must be approved by the FFO authorized officer. The additional information below must also be provided to the FFO:

    a. Pesticide use for trim out will require a Pesticide Use Proposal (PUP). A PUP is required ***prior*** to any treatment and must be approved by the FFO Noxious Weed Coordinator. Only pesticides authorized for use on BLM lands would be used and applied by a licensed pesticide applicator. The use of pesticides would comply with federal and state laws and used only in accordance with their registered use and limitations. Hilcorp's weed-control contractor would contact the BLM-FFO prior to using these chemicals and provide Pesticide Use Reports (PURs) post treatment.
    b. A Pesticide Use Report (PUR) or a Biological Use Report (BUR) is required to report any chemical, or biological treatments used to eradicate, or control vegetation on site. Reporting will be required quarterly and annually or per request from the FFO Noxious Weed Coordinator.

22. **Paleontology:** A permitted paleontological monitor must be present during any surface disturbing activities related to the project. The contracted paleontologist shall be notified at least 48 hours prior to the commencement of any surface disturbing activities. Any paleontological resource discovered by the Operator, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant scientific values. The Holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the Holder.

23. **Visual Resources**: Dark Sky COAs need to be applied to existing lighting, which is not dark sky friendly and to any additional lights added as part of pad expansion. All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source). All permanent lighting will be pointed straight down at the ground in order to prevent light spill to the sides. All permanent lighting will be 4000° Kelvin or less with 3000° Kelvin preferred. Warmer light colors are less noticeable by humans and cause less impact to wildlife. All permanent lighting will be controlled by a switch and/or timer which allows the lights to be turned on when workers are on location during dark periods but will keep the lights off the majority of the time.

Wildlife Resources

24. **Wildlife:** The proposed project is not anticipated to have significant impacts on small or big game species. However, the project is located within the BLM FFO-designated Middle Mesa Big Game SDA, requiring a closure from December 1st through March 31st of each year. This stipulation applies only to construction, drilling, and completion activities. It does not apply to operation and maintenance of production facilities.

25. **Threatened, Endangered or Sensitive Species:** If, in operations the operator/holder discovers any Threatened, Endangered, or Sensitive species, work in the vicinity of the discovery will be suspended and the discovery promptly reported to the BLM-FFO T&E specialist at (505) 564-7600. The BLM-FFO will then specify what action is to be taken. Failure to notify the BLM-FFO about a discovery may result in civil or criminal penalties in accordance with The Endangered Species Act (as amended).

Soil, Air, Water

26. **Land Farming:** No excavation, remediation or closure activities will be authorized without prior approval, on any federal or Indian mineral estate, federal surface, or federal

ROW. A Sundry Notice (DOI, BLM Form 3160-5) must be submitted with an explanation of the remediation or closure plan for on-lease actions.

27. **Emission Control Standard:** Compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NOx at 2 grams per horsepower hour or less to comply with the New Mexico Environmental Department, Air Quality Bureau's guidance.

28. **Waste Disposal:** All fluids (i.e., scrubber cleaners) used during washing of production equipment, including compressors, will be properly disposed of to avoid ground contamination, or hazard to livestock or wildlife.

29. **Waste Disposal:** Waste materials produced during all phases of operation will be disposed of promptly in an approved manner so it will not impact the air, soil, water, vegetation or animals. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment. All liquid waste, completion fluids and drilling products associated with oil and gas operations will be removed and deposited in an approved disposal site. Portable toilets will remain on site throughout well pad construction, drilling and reclamation. All fluids (i.e. scrubber cleaners) used during washing of production equipment, including compressors, will be properly disposed of to avoid ground contamination or hazard to livestock or wildlife. Construction sites shall be maintained in a sanitary condition at all times; waste materials at those sites shall be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including, but not limited to, human waste, trash, garbage, refuse, oil drums, petroleum products, ashes and equipment.

Cultural Resources

30. **Discovery of Cultural Resources in the Absence of Monitoring:** If, in its operations, operator/holder discovers any previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to BLM Field Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery in accordance with 36 CFR Section 800.13, in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property, or in accordance with an approved program alternative. Minor recordation, stabilization, or data recovery may be performed by BLM or a third party acting on its behalf, such as a permitted cultural resources consultant. If warranted, more extensive archaeological or alternative mitigation, likely implemented by a permitted cultural resources consultant, may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any mitigations determined appropriate through the agency's Section 106 consultation are completed. Failure to notify the BLM about a discovery may result in civil or criminal penalties in accordance with the Archeological

Resources Protection Act (ARPA) of 1979, as amended, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, as amended, and other applicable laws.

31. **Discovery of Cultural Resources during Monitoring:** If monitoring confirms the presence of previously unidentified historic or prehistoric cultural resources, then work in the vicinity of the discovery will be suspended and the monitor will promptly report the discovery to the BLM Field Manager. BLM will then specify what action is to be taken. If there is an approved "discovery plan" in place for the project, then the plan will be executed. In the absence of an approved plan, the BLM will evaluate the significance of the discovery in accordance with 36 CFR Section 800.13, in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property, or in accordance with an approved program alternative. Minor recordation, stabilization, or data recovery may be performed by BLM or a third party acting on its behalf, such as a permitted cultural resources consultant. If warranted, more extensive archaeological or alternative mitigation, likely implemented by a permitted cultural resources consultant, may be required of the operator/holder prior to allowing the project to proceed. Further damage to significant cultural resources will not be allowed until any mitigations determined appropriate through the agency's Section 106 consultation are completed.

32. **Damage to Sites**: If, in its operations, operator/holder damages, or is found to have damaged any previously documented or undocumented historic or prehistoric cultural resources, excluding "discoveries" as noted above, the operator/holder agrees at his/her expense to have a permitted cultural resources consultant prepare a BLM approved damage assessment and/or data recovery plan. The operator/holder agrees at his/her expense to implement a mitigation that the agency finds appropriate given the significance of the site, which the agency determines in consultation with the appropriate State or Tribal Historic Preservation Officer(s) and Indian tribe(s) that might attach religious and cultural significance to the affected property. This mitigation may entail execution of the data recovery plan by a permitted cultural resources consultant and/or alternative mitigations. Damage to cultural resources may result in civil or criminal penalties in accordance with the Archeological Resources Protection Act (ARPA) of 1979, as amended, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, as amended, and other applicable laws.

33. **Employee Education:** All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles, and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

See below additional cultural stipulations.

DOI-BLM-NM-F010-2025-0015-EA

BLM Report Number: 2025(I)008.1F

USGS Map: Burnt Mesa, NM

Activity Code: 1310

NMCRIS No: 157893

CULTURAL RESOURCE RECORD OF REVIEW

BUREAU OF LAND MANAGEMENT

FARMINGTON FIELD OFFICE

1. Description of Report/Project:

Project Name: Allison 601H Well Pad Project.

Project Sponsor: Hilcorp Energy.

Arch. Firm & Report No.: SWCA Encironmental; SWCA Report No. SWCA: 25-184

Location: T32N R7W Section 12.

Well Footages:

Split Estate: yes

Project Dimensions: 700 ft x 450 ft – previously constructed well pad (800 ft x 550 ft with a 50 ft construction zone).

Note: The well pad was previously constructed, but the proposed wells have not yet been drilled.

Sites Located: LA4547/ NM-01-233 (NRHP: Eligible; Update; Avoided).

LA4740/ NM-01-20522 (NRHP: Not Determined: No Further Work). **Not Relocated.**

LA4743/ NM-01-20525 (NRHP: Not Determined: No Further Work). **Not Relocated.**

LA201960/ NM-210-49895 (NRHP: Not Determined; No Further Work). **Not Relocated.**

LA201961/ NM-210-49896 (NRHP: Not Determined; Update; Avoided).

Determination: No Effect to Historic Properties.

2. Field Check: No

3. Cultural ACEC: No.

4. Sensitive Cultural Area: No.

5. Recommendation: *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED*: X

6. Reviewer /Archaeologist: Kim Adams **Date**: 3/19/2025

Report Summary	BLM	Other	Total
Acres Inventoried	1.11	15.92	17.03
Sites Recorded	0	0	0
Prev. Recorded Sites	1	1	2
Sites Avoided	1	1	2
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.215.4966 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(I)008.1F

Project Name: Allison 601H Well Pad Project.

Project Sponsor: Hilcorp Energy.

1. SITE PROTECTION AND EMPLOYEE EDUCATION:

All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:

A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Ensure that a site protection barrier is located as indicated on the attached map in the vicinity of LA201961.
- Inform BLM-FFO archaeologists that monitoring will be occurring within 24 hours of the scheduled monitoring.
- Observe all construction within 100'of LA4547, & LA201961.
- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.

3. SITE PROTECTION BARRIER:

- The temporary site protection barrier will be erected prior to any construction. The barrier will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barrier will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barrier will be placed as indicated on the attached maps.
- There will be no surface-disturbing activities or vehicle traffic past the barrier.

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.215.4966 or kadams@blm.gov.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(I)008.1F

Project Name: Allison 601H Well Pad Project.

Project Sponsor: Hilcorp Energy.

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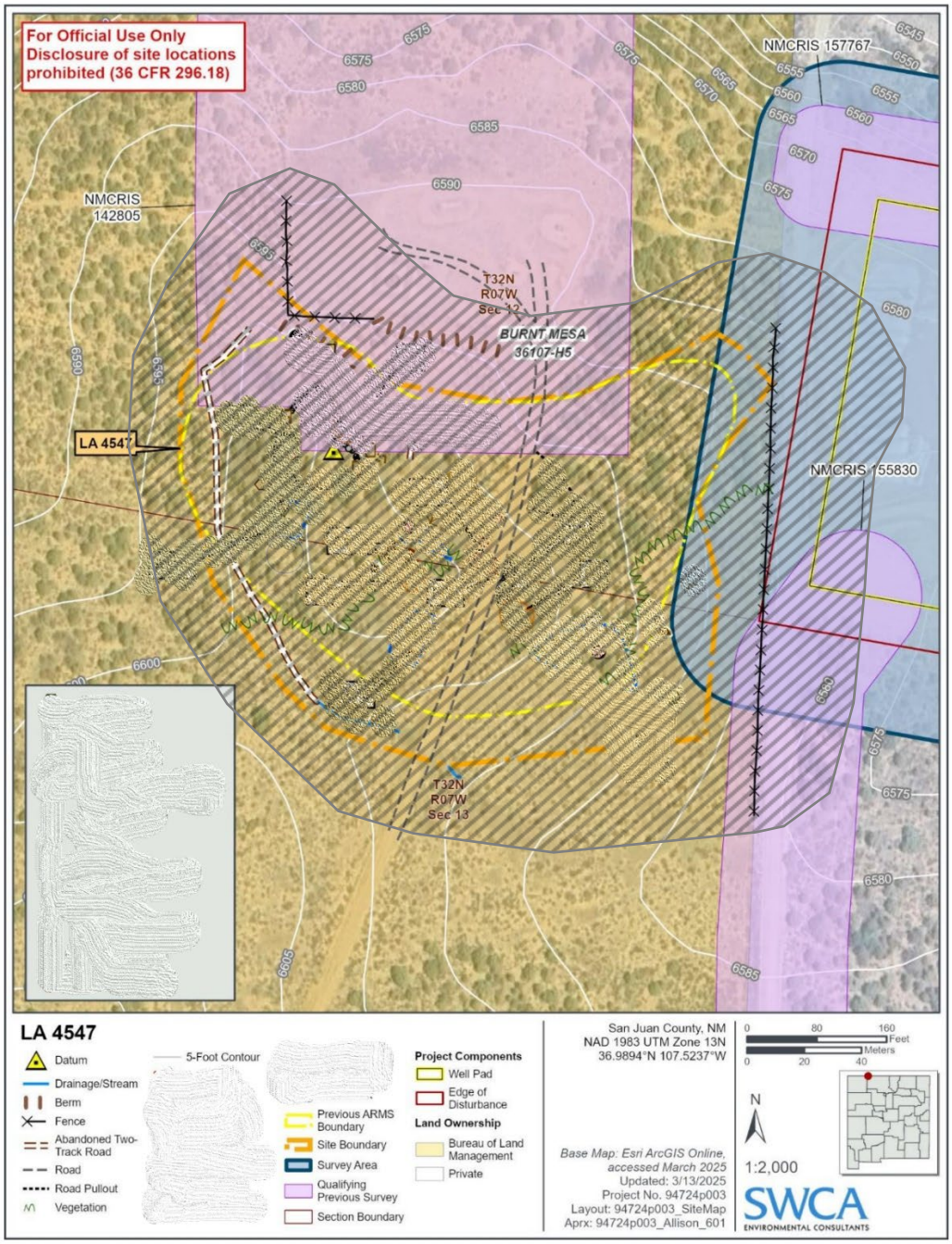
MONITOR ZONE = 



For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(I)008.1F

DOI-BLM-NM-F010-2025-0015-EA

Approval Date: 04/14/2025

Project Name: Allison 601H Well Pad Project.

Project Sponsor: Hilcorp Energy.

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MONITOR ZONE = SITE PROTECTION BARRIER =

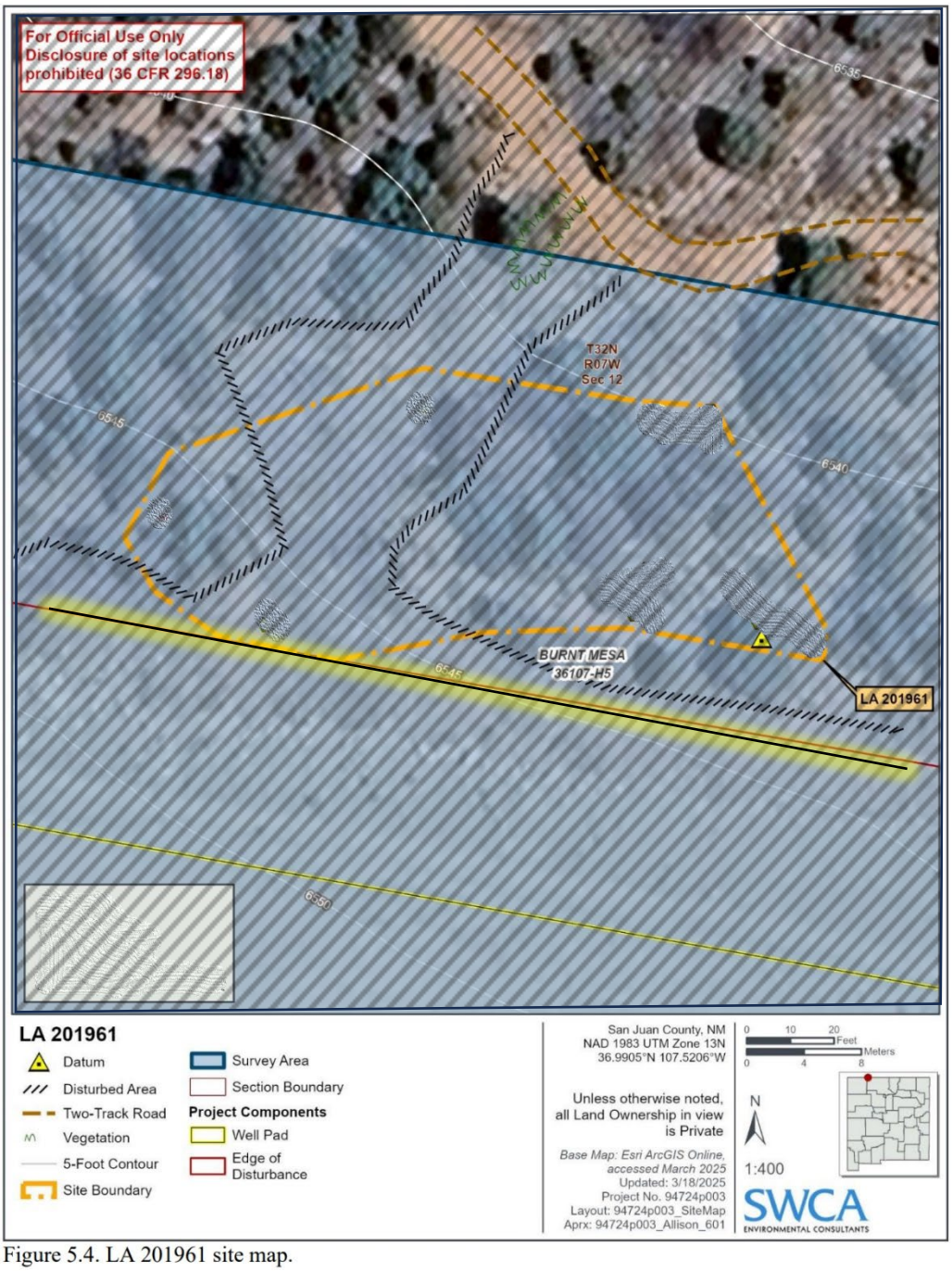


Figure 5.4. LA 201961 site map.

BLM Report Number: 2025(II)014F

USGS Map: Burnt Mesa, NM

Activity Code: 1310

NMCRIS No: 155830

CULTURAL RESOURCE RECORD OF REVIEW

BUREAU OF LAND MANAGEMENT

FARMINGTON FIELD OFFICE

1. Description of Report/Project:

Project Name: Allison 601H Layflat.

Project Sponsor: Hilcorp Energy Company

Arch. Firm & Report No.: PaleoWest.; PaleoWest Report No. 24-204

Location: T31N R6W Sections 4, & 9.

Well Footages: N/A

Split Estate: Yes

Project Dimensions: 28,240 ft x 40 ft – layflat line.

Sites Located: LA4415/NM-01-884 (NRHP: Not Determined; **Not Relocated**).

LA4419/NM-01-888 (NRHP: Eligible; Update; Avoided).

LA4420/NM-070-822 (NRHP: Not Determined; Update; Partially Avoided).

LA4545/NM-01-36016 (NRHP: Eligible; Update; Partially Avoided).

LA4546/NM-01-36017 (NRHP: Eligible; Update; Partially Avoided).

LA4549/NM-210-49928 (NRHP: Eligible; Update; Partially Avoided).

LA46153/NM-210-36019 (NRHP: Eligible; Update; Partially Avoided).

LA46295/NM-210-36020 (NRHP: Eligible; Update; Avoided).

LA46550/NM-210-32272 (NRHP: Eligible; Update; Avoided).

LA71645NM-210-35931 (NRHP: Not Determined; Update; Avoided).

LA71649/NM-210-35935 (NRHP: Not Determined; **Not Relocated).**

HCPI53627/NM-01-49555 (NRHP: Not Eligible; Update; Partially Avoided; No Further

Work).

LA204816/NM-01-49929 (NRHP: Not Eligible; Avoided; No Further Work).

LA204817/NM-070-49930 (NRHP: Not Eligible; Partially Avoided; No Further Work).

LA204818/NM-01-49931 (NRHP: Not Eligible; Partially Avoided; No Further Work).

Determination: No Effect to Historic Properties.

2. Field Check: none.

3. Cultural ACEC: No.

4. Sensitive Cultural Area: No.

5. Recommendation: *PROCEED WITH ACTION:* X *STIPULATIONS ATTACHED*: _X_

6. Reviewer /Archaeologist: Kim Adams **Date**: 2/21/2025

Report Summary	BLM	Other	Total
Acres Inventoried	44.43	53.05	97.48
Sites Recorded	3	0	3
Prev. Recorded Sites	8	4	12
Sites Avoided	3	2	5
Sites Treated	0	0	0

Discovery of Cultural Resources in the Presence or Absence of Monitoring: If any previously unidentified historic or prehistoric cultural resources are discovered during construction or project operations, work in the vicinity of the discovery will be suspended and the discovery will promptly be reported to the BLM Field Manager.

Note: If there are questions about these stips, contact Kim Adams (BLM) at 505.215.4966 or kadams@blm.gov.

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC.

DOI-BLM-NM-F010-2025-0015-EA

1. SITE PROTECTION AND EMPLOYEE EDUCATION:

All employees of the project, including the Project Sponsor and its contractors and sub-contractors will be informed that cultural sites are to be avoided by all personnel, personal vehicles and company equipment. They will also be notified that it is illegal to collect, damage, or disturb cultural resources, and that such activities are punishable by criminal and or administrative penalties under the provisions of the Archaeological Resources Protection Act (16 U.S.C. 470aa-mm) when on federal land and the New Mexico Cultural Properties Act NMSA 1978 when on state land.

2. ARCHAEOLOGICAL MONITORING IS REQUIRED:

A copy of these stipulations will be supplied to the archeological monitor at least two working days prior to the start of construction activities. No construction activities, including vegetation removal, may begin before the arrival of the archaeological monitor.

The monitor will:

- Ensure that the site protection barriers are located as indicated on the attached map in the vicinity of LA4419, LA4420, LA4545, LA4549, LA46153, LA46295, & LA71645.
- Inform BLM-FFO archaeologists that monitoring will be occurring within 24 hours of the scheduled monitoring.
- Observe all construction activities within 100'of LA4419, LA4420, LA4545, LA4549, LA46153, LA46295, LA46550, & LA71645.
- Submit a report of the monitoring activities within 30 days of completion of monitoring unless other arrangements are made with the BLM. These stipulations must be attached to the report.
- Ensure that the road that traverses through LA46295 is closed by a natural barrier (large boulders if possible) and that road closure signage has been placed in this location.

3. SITE PROTECTION BARRIER:

- The temporary site protection barriers will be erected prior to the start of construction. The barriers will consist of upright wooden survey lath spaced no more than 10 feet apart and marked with blue flagging or blue paint. The barriers will remain in place through reclamation and reseeding and shall be promptly removed after reclamation.
- The barriers will be placed as indicated on the attached map.
- There will be no surface-disturbing activities or vehicle traffic past the barriers.
- The arch monitor will ensure that fencing for LA4420 is placed at least 15 cm from each AC (between the ACs and the layflat).

Note: If there are questions about these stipulations, contact Kim Adams (BLM) at 505.215.4966 or kadams@blm.gov.

DOI-BLM-NM-F010-2025-0015-EA

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs. This site boundary must be 100% avoided

Project Sponsor: Logos Resources II, LLC. . Fencing must be placed outside of the site boundary.

MONITOR ZONE =  TEMPORARY FENCING =

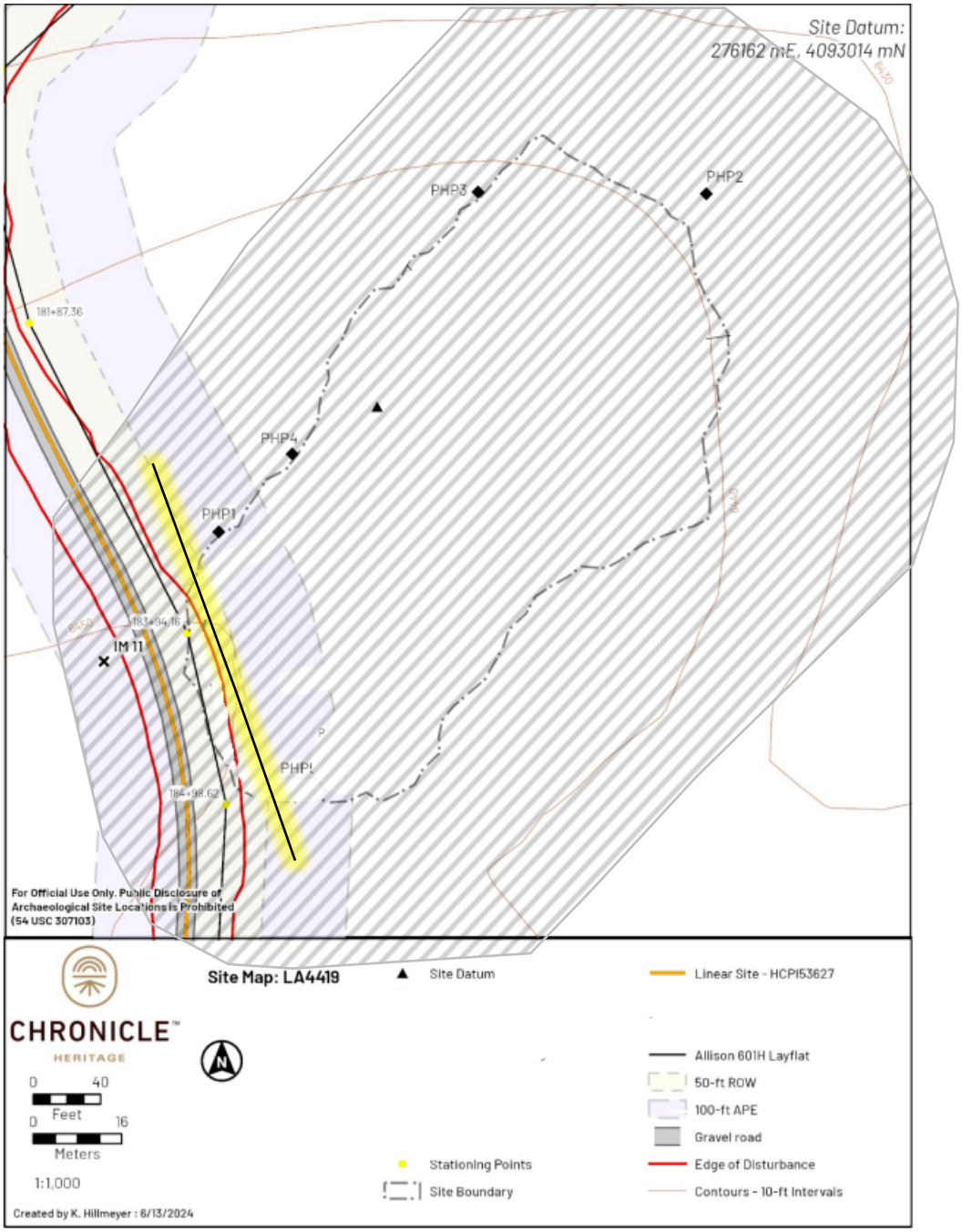


Figure 6-1. LA4419 site map.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

DOI-BLM-NM-F010-2025-0015-EA

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC.

MONITOR ZONE = TEMPORARY FENCING =

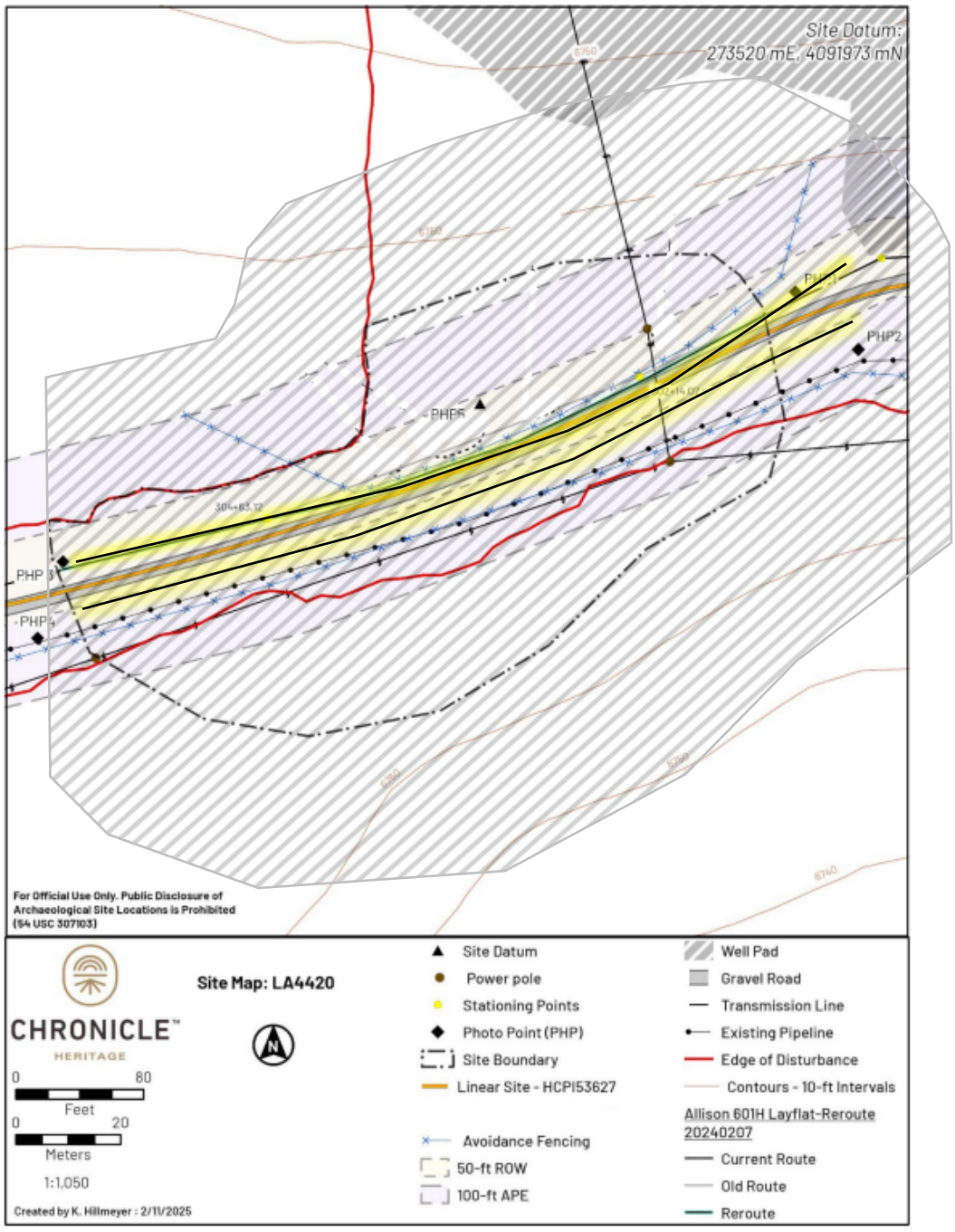


Figure 6-7. LA4420 site map.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC.

MONITOR ZONE = TEMPORARY FENCING =

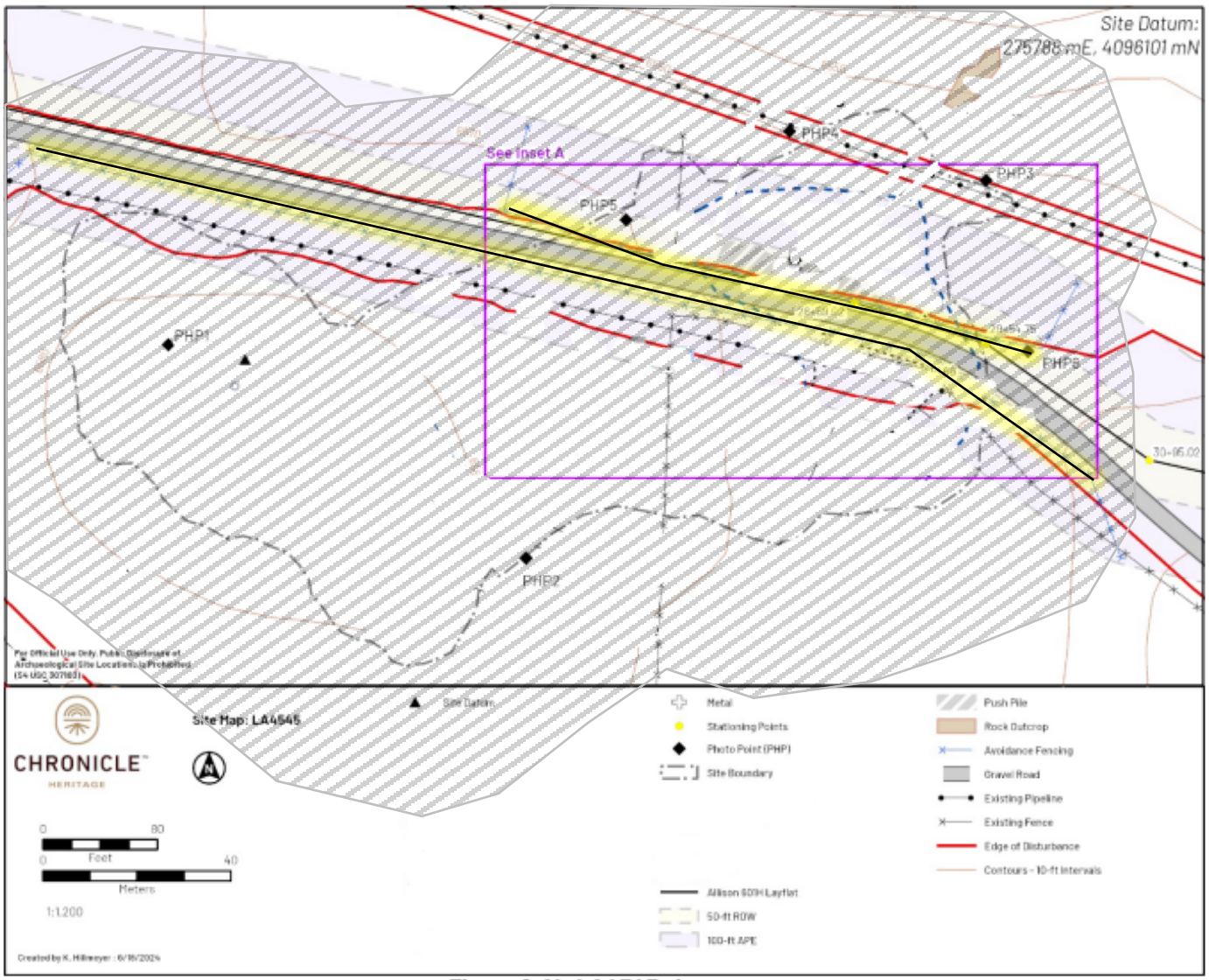


Figure 6-14. LA4545 site map.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC. Fencing must be placed in the existing disturbance area.

MONITOR ZONE =  TEMPORARY FENCING =

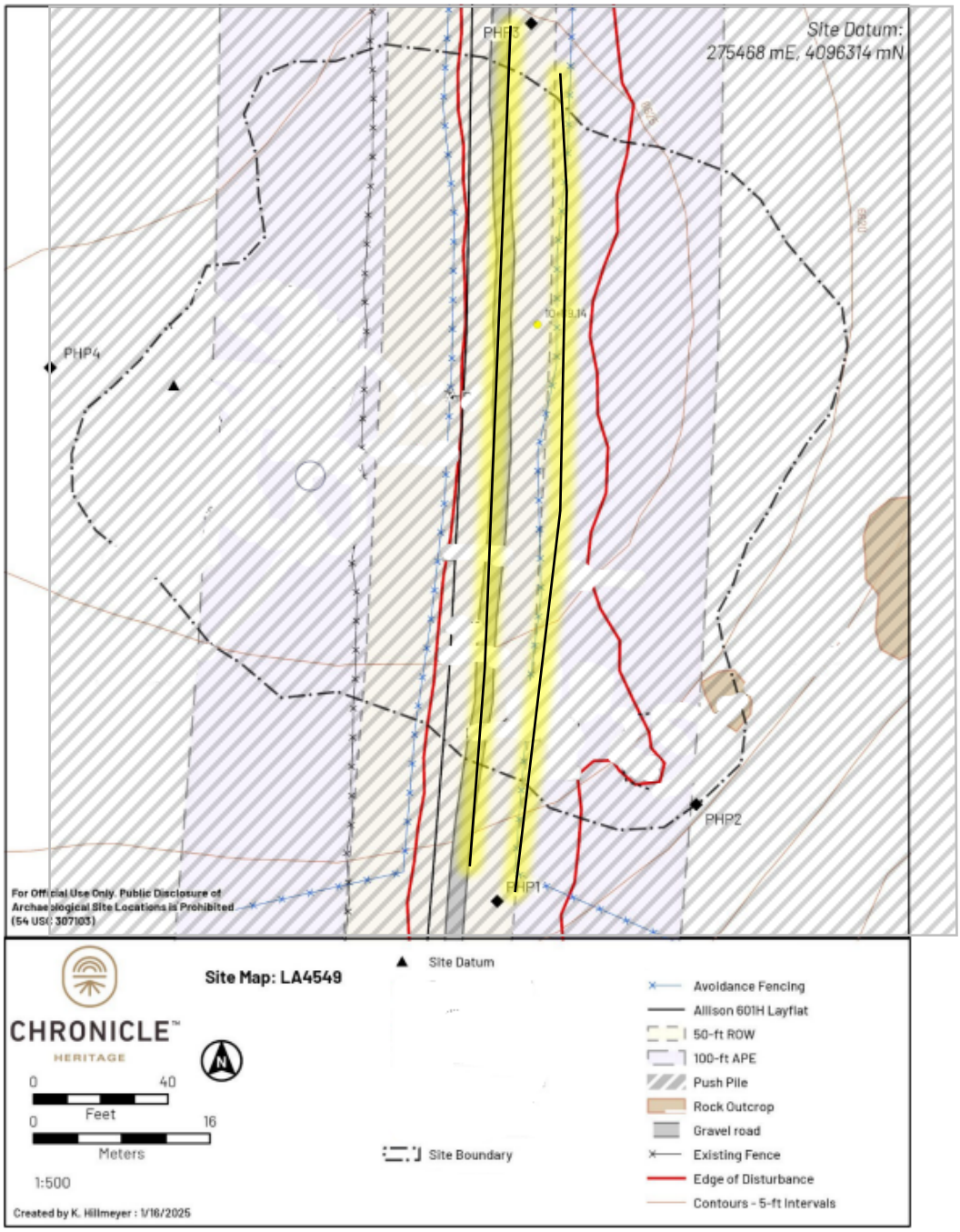


Figure 6-24. LA4549 site map.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

DOI-BLM-NM-F010-2025-0015-EA

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC. Fencing must be placed in the existing disturbance area.

MONITOR ZONE = TEMPORARY FENCING =

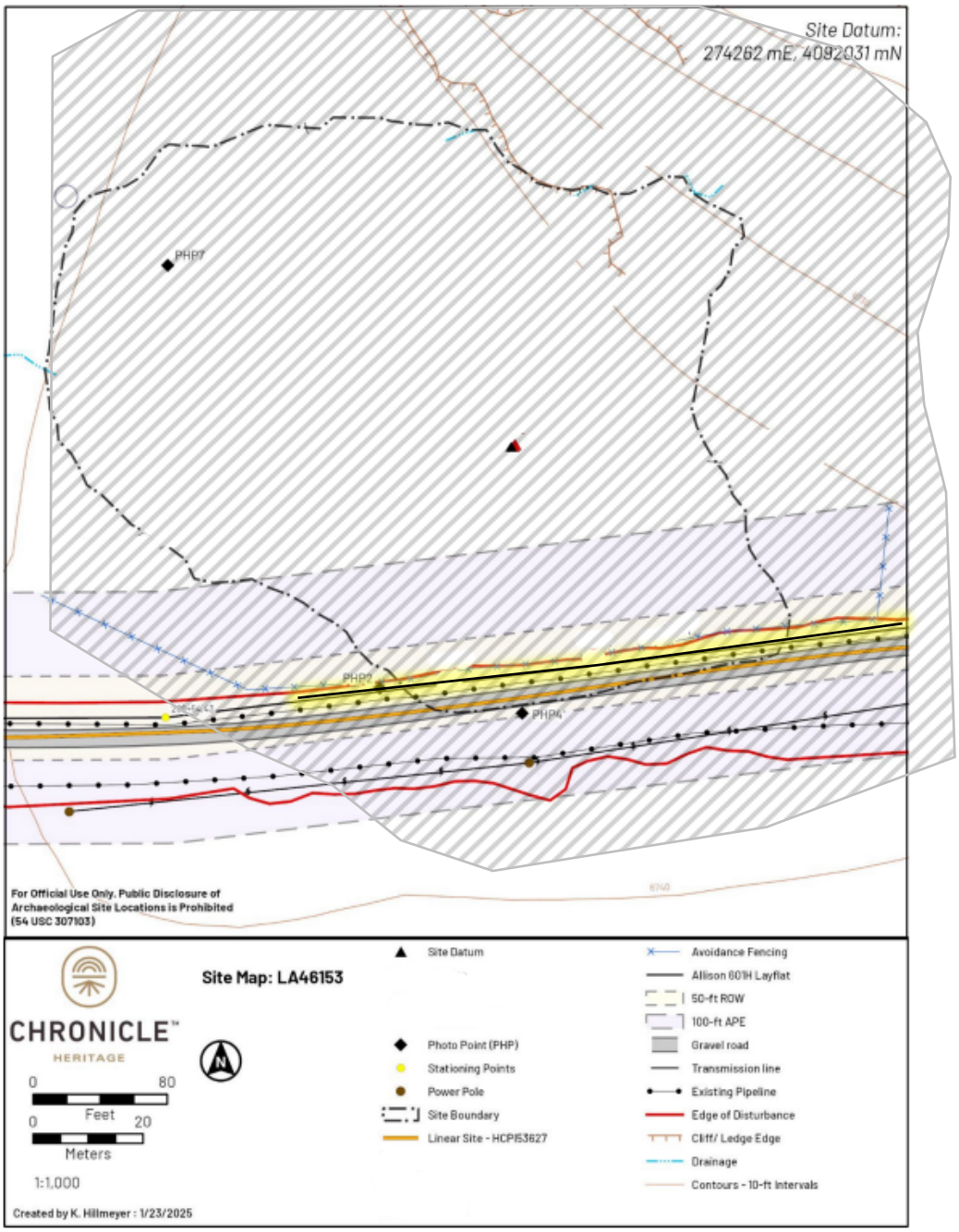


Figure 6-30. LA46153 site map.

DOI-BLM-NM-F010-2025-0015-EA

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs. Site must be 100% Avoided.

Project Sponsor: Logos Resources II, LLC. Fencing must be placed outside of the site boundary.

MONITOR ZONE = 

TEMPORARY FENCING =

ROAD BARRIER =

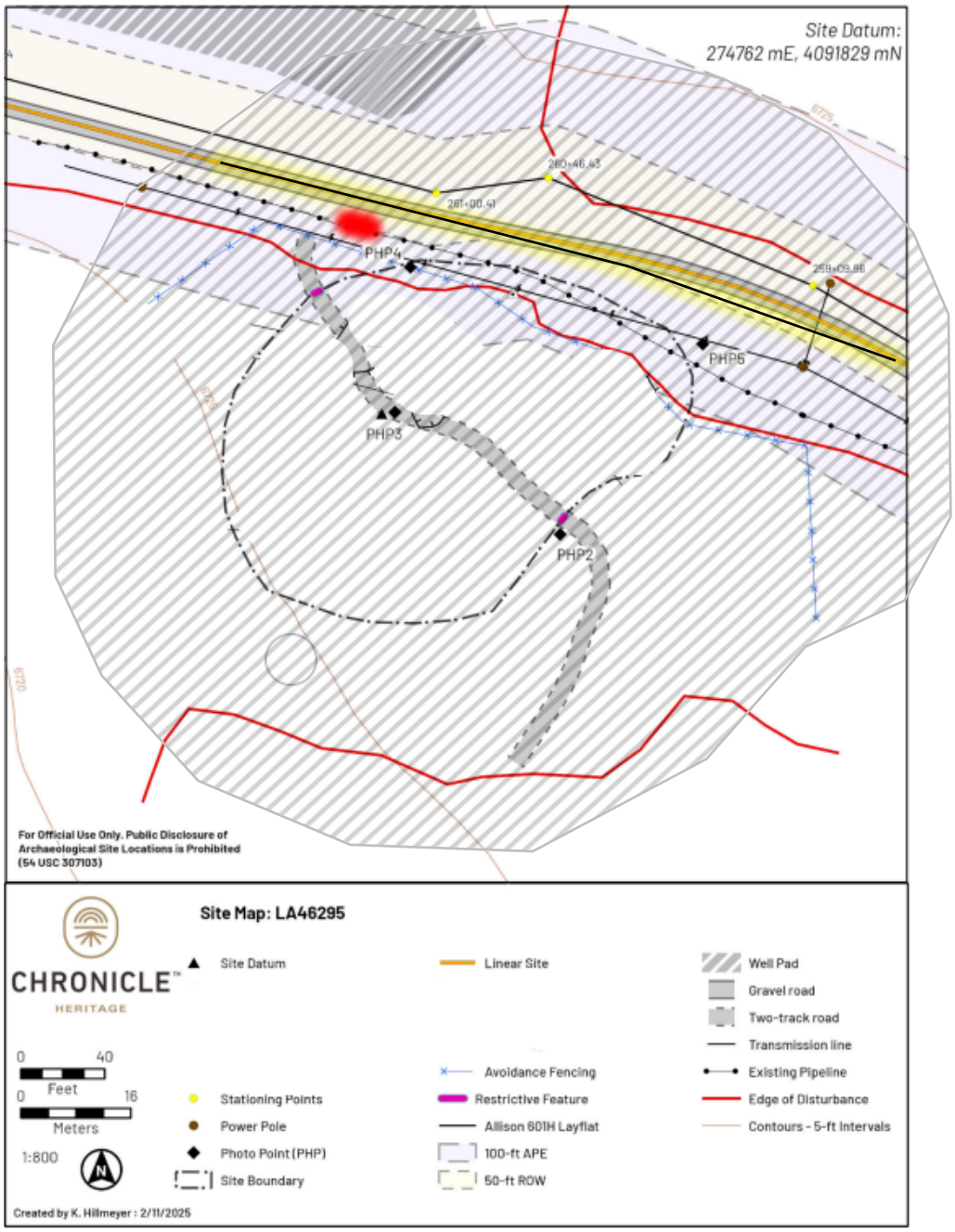


Figure 6-39. LA46295 site map.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18)

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

DOI-BLM-NM-F010-2025-0015-EA

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC.

MONITOR ZONE =

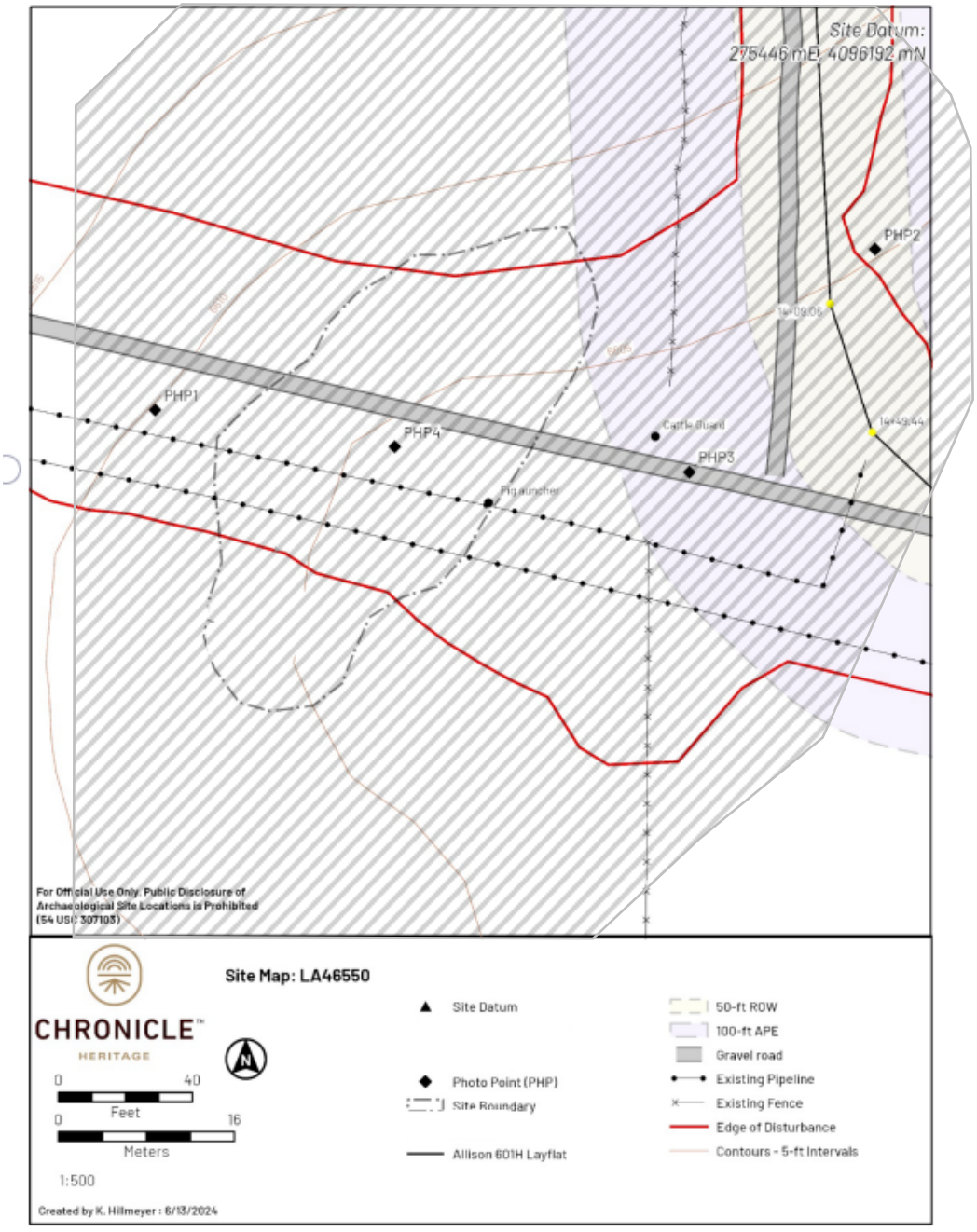


Figure 6-47. LA46550 site map.

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

Project Name: Rosa Unit 550H (Pad 5) Well Pad, Layflat, and TUAs.

Project Sponsor: Logos Resources II, LLC.

MONITOR ZONE =  TEMPORARY FENCING =

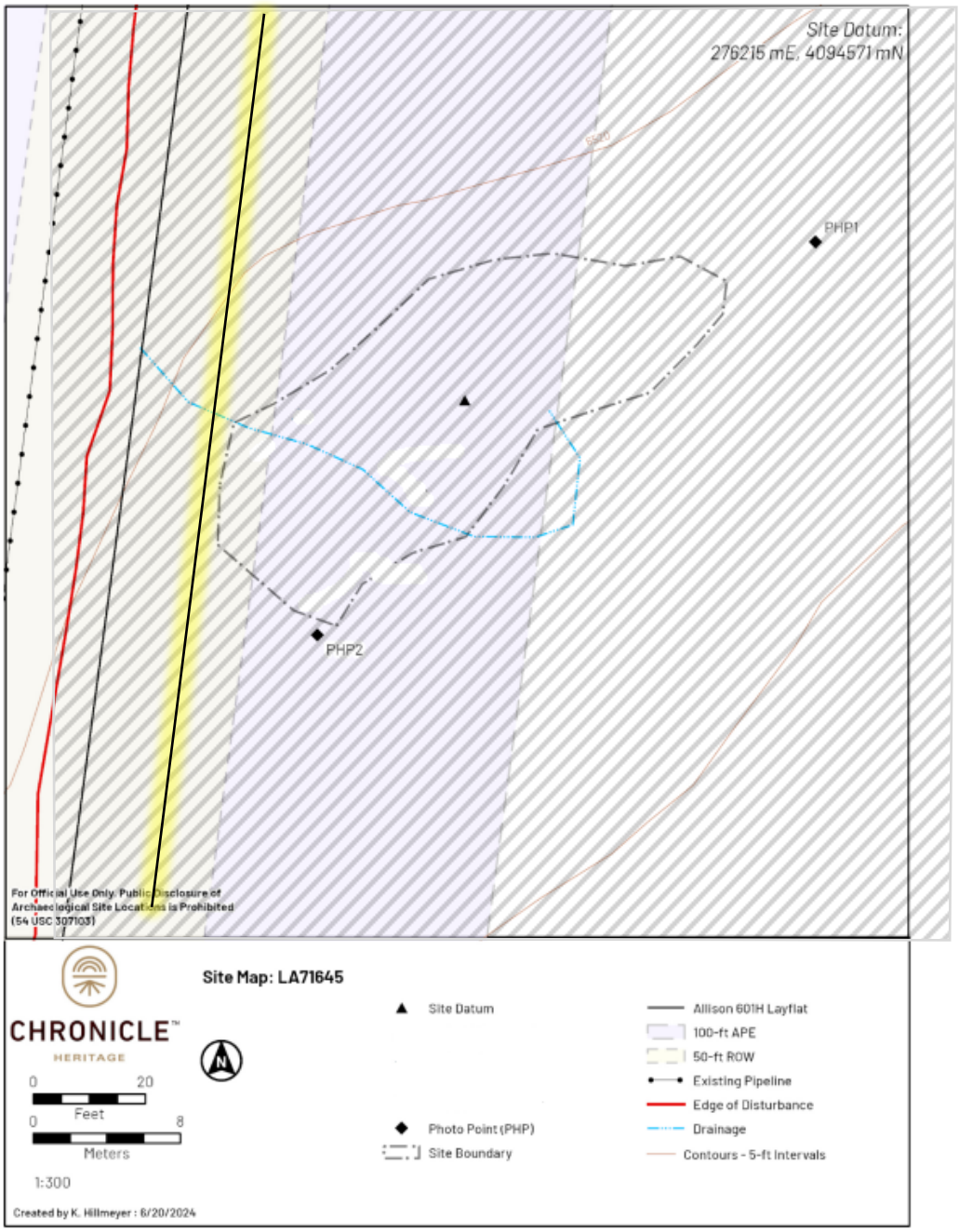


Figure 6-50. Site sketch map for LA71645.

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Farmington District Office
6251 College Blvd, Suite A
Farmington, New Mexico 87402

In Reply Refer To:
3162.3-1(NMF0110)

* HILCORP ENERGY COMPANY

#ALLISON 602 FEDERAL COM 605H

Lease: NMNM04207 Agreement: TBD
SH: SESW Section 12, T. 32 N., R. 7 W.
San Juan County, New Mexico
BH: NENE Section 17, T. 32 N., R. 6 W.
San Juan County, New Mexico
***Above Data Required on Well Sign**

GENERAL REQUIREMENTS FOR OIL AND GAS OPERATIONS ON FEDERAL AND INDIAN LEASES

The following special requirements apply and are effective when **checked**:

A. ☒ Note all surface/drilling conditions of approval attached.

B. ☒ The required wait on cement (WOC) time will be a minimum of 500 psi compressive strength at 60 degrees. Blowout preventor (BOP) nipple-up operations may then be initiated

C. ☐ Test the surface casing to a minimum of _____ psi for 30 minutes.

D. ☐ Test all casing strings below the surface casing to .22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield burst) for a minimum of 30 minutes.

E. ☒ Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the Bureau of Land Management, New Mexico State Office, Reservoir Management Group, 301 Dinosaur Trail, Santa Fe, New Mexico 87508.
The effective date of the agreement must be **prior** to any sales.

F. ☐ The use of co-flex hose is authorized contingent upon the following:
1. From the BOP to the choke manifold: the co-flex hose must be hobbled on both ends and saddle to prevent whip.
2. From the choke manifold to the discharge tank: the co-flex hoses must be as straight as practical, hobbled on both ends and anchored to prevent whip.
3. The co-flex hose pressure rating must be at least commensurate with approved BOPE.

I. GENERAL

A. Full compliance with all applicable laws and regulations, with the approved Permit to drill, and with the approved Surface Use and Operations Plan is required. Lessees and/or operators are fully accountable for the actions of their contractors and subcontractors. Failure to comply with these requirements and the filing of required reports will result in strict enforcement pursuant to 43 CFR 3163.1 or 3163.2.

B. Each well shall have a well sign in legible condition from spud date to final abandonment. The sign should show the operator's name, lease serial number, or unit name, well number, location of the well, and whether lease is Tribal or Allotted, (See 43 CFR 3162.6(b)).

C. A complete copy of the approved Application for Permit to Drill, along with any conditions of approval, shall be available to authorized personnel at the drill site whenever active drilling operations are under way.

D. For Wildcat wells only, a drilling operations progress report is to be submitted, to the BLM-Field Office, weekly from the spud date until the well is completed and the Well Completion Report is filed. The report should be on 8-1/2 x 11 inch paper, and each page should identify the well by; operator's name, well number, location and lease number.

E. As soon as practical, notice is required of all blowouts, fires and accidents involving life-threatening injuries or loss of life. (See NTL-3A).

F. BOP equipment (except the annular preventer) shall be tested utilizing a test plug to full working pressure for 10 minutes. No bleed-off of pressure is acceptable. (See 43 CFR 3172.6(b)(9)(ii)).

G. The operator shall have sufficient weighting materials and lost circulation materials on location in the event of a pressure kick or in the event of lost circulation. (See 43 CFR 3172.8(a)).

H. The flare line(s) discharge shall be located not less than 100 feet from the well head, having straight lines unless turns are targeted with running tees, and shall be positioned downwind of the prevailing wind direction and shall be anchored. The flare system shall have an effective method for ignition. Where noncombustible gas is likely or expected to be vented, the system shall be provided supplemental fuel for ignition and to maintain a continuous flare. (See 43 CFR 3172.8(b)(7)).

I. Prior approval by the BLM-Authorized Office (Drilling and Production Section) is required for variance from the approved drilling program and before commencing plugging operations, plug back work, casing repair work, corrective cementing operations, or suspending drilling operations indefinitely. Emergency approval may be obtained orally, but such approval is contingent upon filing of a Notice of Intent sundry within three business days. **Any changes to the approved plan or any questions regarding drilling operations should be directed to BLM during regular business hours at 505-564-7600. Emergency program changes after hours should be directed to Virgil Lucero at 505-793-1836.**

J. The Inspection and Enforcement Section (I&E), phone number (505-564-7750) is to be notified at least 24 hours in advance of BOP test, spudding, cementing, or plugging operations so that a BLM representative may witness the operations.

K. Unless drilling operations are commenced within three years according to 43 CFR 3171.14, approval of the Application for Permit to Drill will expire. No extensions will be granted.

L. From the time drilling operations are initiated and until drilling operations are completed, a member of the drilling crew or the tool pusher shall maintain rig surveillance at all times, unless the well is secured with blowout preventers or cement plugs.

M. If for any reason, drilling operations are suspended for more than 90 days, a written notice must be provided to this office outlining your plans for this well.

N. **Commingling**: No production (oil, gas, and water) from the subject well should start until Sundry Notices (if necessary) granting variances from applicable regulations as related to commingling and off-lease measurement are approved by this office. (See 43 CFR 3173.14)

II. REPORTING REQUIREMENTS

A. For reporting purposes, all well Sundry notices, well completion and other well actions shall be referenced by the appropriate lease, communitization agreement and/or unit agreement numbers.

B. The following reports shall be filed with the BLM-Authorized Officer online through AFMSS 2 within 30 days after the work is completed.

1. Provide complete information concerning.

a. Setting of each string of casing. Show size and depth of hole, grade and weight of casing, depth set, depth of all cementing tools that are used, amount (in cubic feet) and types of cement used, whether cement circulated to surface and all cement tops in the casing annulus, casing test method and results, and the date work was done. Show spud date on first report submitted.

b. Intervals tested, perforated (include size, number and location of perforations), acidized, or fractured; and results obtained. Provide date work was done on well completion report and completion sundry notice.

c. Subsequent Report of Abandonment, show the way the well was plugged, including depths where casing was cut and pulled, intervals (by depths) where cement plugs were replaced, and dates of the operations.

2. Well Completion Report will be submitted with 30 days after well has been completed.

a. Initial Bottom Hole Pressure (BHP) for the producing formations. Show the BHP on the completion report. The pressure may be: 1) measured with a bottom hole bomb, or; 2) calculated based on shut in surface pressures (minimum seven day buildup) and fluid level shot.

3. Submit a cement evaluation log if cement is not circulated to surface.

C. Production Startup Notification is required no later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site or resumes production in the case of a well which has been off production for more than 90 days. The operator shall notify the Authorized Officer by letter or Sundry Notice, Form 3160-5, or orally to be followed by a letter or Sundry Notice, of the date on which such production has begun or resumed. CFR 43 3162.4-1(c).

III. DRILLER'S LOG

The following shall be entered in the daily driller's log: 1) Blowout preventer pressures tests, including test pressures and results, 2) Blowout preventer tests for proper functioning, 3) Blowout prevention drills conducted, 4) Casing run, including size, grade, weight, and depth set, 5) How pipe was cemented, including amount of cement, type, whether cement circulated to surface, location of cementing tools, etc., 6) Waiting on cement time for each casing string, 7) Casing pressure tests after cementing, including test pressure and results, and 8) Estimated amounts of oil and gas recovered and/or produced during drill stem test.

IV. GAS FLARING

Gas produced from this well may not be vented or flared beyond an initial, authorized test period of * Days, 20 MMCF following its (completion)(recompletion), or flowback has been routed to the production separator, whichever first occurs, without the prior, written approval of the authorized officer in accordance with 43 CFR 3179.81. Should gas be vented or flared without approval beyond the test period authorized above, you may be directed to shut-in the well until the gas can be captured or approval to continue venting or flaring as uneconomic is granted. You shall be required to compensate the lessor for the portion of the gas vented or flared without approval which is determined to have been avoidably lost.

*30 days, unless a longer test period is specifically approved by the authorized officer. The 30-day period will commence upon the beginning of flowback following completion or recompletion.

V. SAFETY

A. All rig heating stoves are to be of the explosion-proof type.

B. Rig safety lines are to be installed.

C. Hard hats and other Personal Protective Equipment (PPE) must be utilized.

VI. CHANGE OF PLANS OR ABANDONMENT

A. Any changes of plans required to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.I.

B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.I. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to be placed, type of plugging mud, etc. A Subsequent Report of Abandonment is required as set forth in Section II.B.1c.

C. Unless a well has been properly cased and cemented, or properly plugged, the drilling rig must not be moved from the drill site without prior approval from the BLM-Authorized Officer.

VII. PHONE NUMBERS

A. For BOPE tests, cementing, and plugging operations the phone number is 505-564-7750 and must be called 24 hours in advance in order that a BLM representative may witness the operations.

B. Emergency program changes after hours contact:

Virgil Lucero (505) 793-1836
Dustin Porch (505) 386-9876
Kenneth Rennick (505) 564-7742
Matthew Kade (505) 564-7736

District I
1625 N. French Drive, Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First Street, Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Drive, Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Drive
Santa Fe, NM 87505

Revised August 1, 2011

Submit one copy to Appropriate District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
	97232	BASIN MANCOS

[4] Property Code	[5] Property Name	[6] Well Number
	ALLISON 602 FEDERAL COM	605H

[7] OGRID No.	[8] Operator Name	[9] Elevation
372171	HILCORP ENERGY COMPANY	6562'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	12	32N	7W		227	SOUTH	1931	WEST	SAN JUAN

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	17	32N	6W		756	NORTH	247	EAST	SAN JUAN

[12] Dedicated Acres		[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
798.77	N/2 Section 17, T32N, R6W Lot 1 & 2, E/2 NW/4, NE/4 Section 18, T32N, R6W NE/4 Section 13, T32N, R7W			

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

[16] OPERATOR CERTIFICATION

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

Signature — Date: 4/24/2024

Amanda Walker
Printed Name

mwalker@hilcorp.com
E-mail Address

[18] SURVEYOR CERTIFICATION

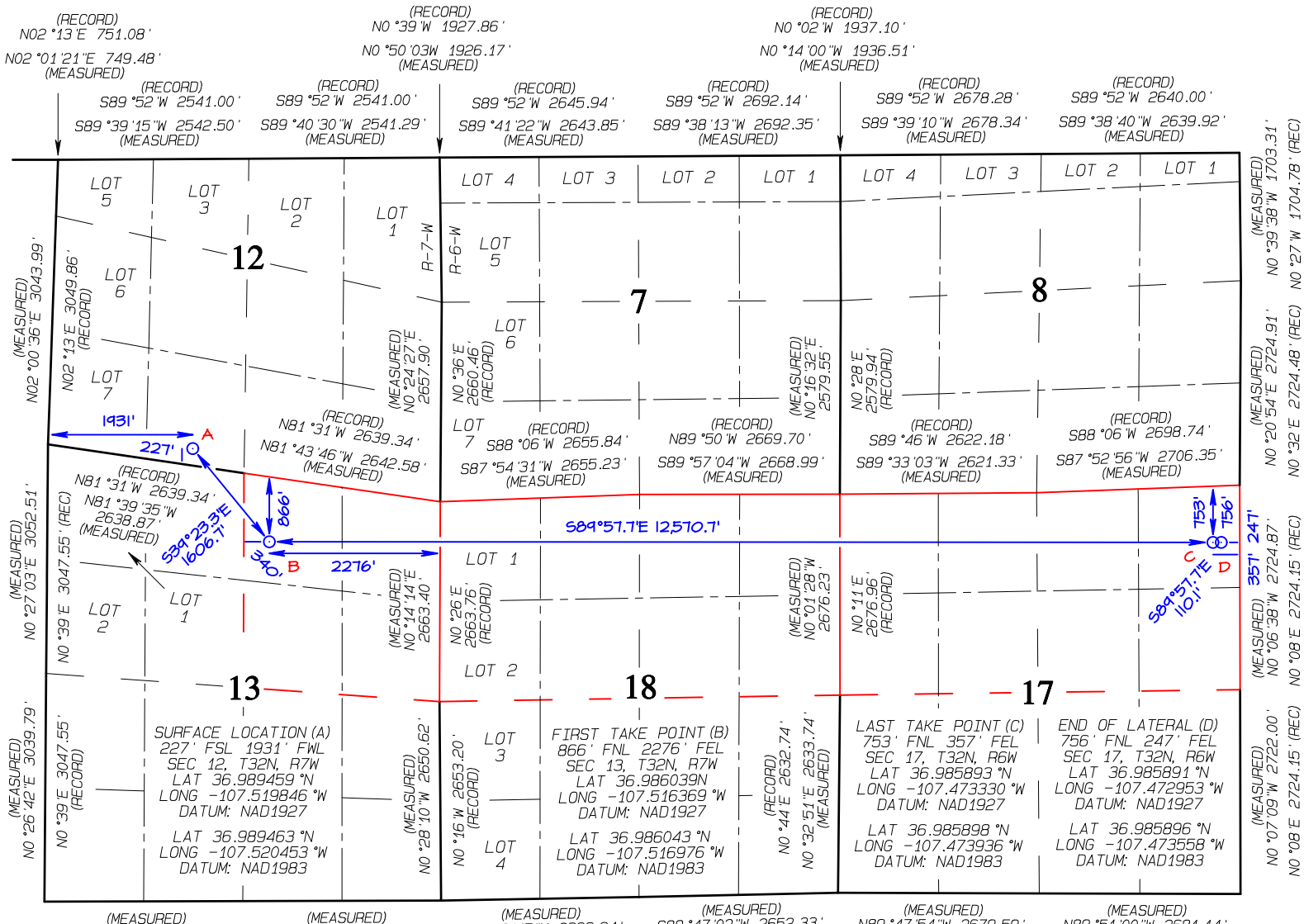
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: APRIL 15, 2024
Date of Survey: MARCH 12, 2024

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269



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	ALLISON 602 FEDERAL COM	605H

[7] OGRID No.	[8] Operator Name	[9] Elevation
372171	HILCORP ENERGY COMPANY	6562'

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

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Signature — Date: 4/24/2024

Amanda Walker
Printed Name

mwalker@hilcorp.com
E-mail Address

[18] SURVEYOR CERTIFICATION

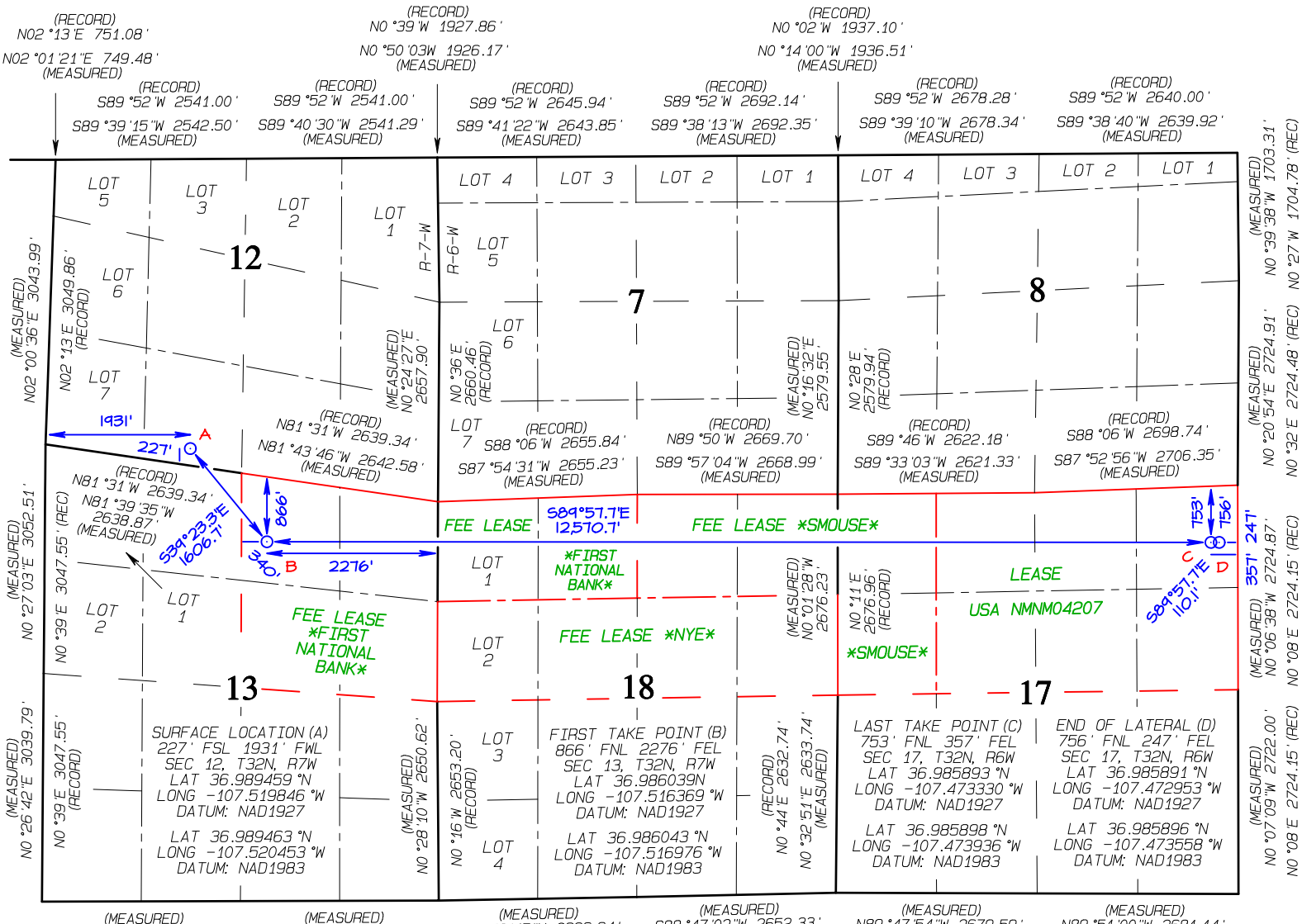
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date Revised: APRIL 15, 2024
Date of Survey: MARCH 12, 2024

Signature and Seal of Professional Surveyor

JASON C. EDWARDS — NEW MEXICO — 15269 — REGISTERED PROFESSIONAL SURVEYOR

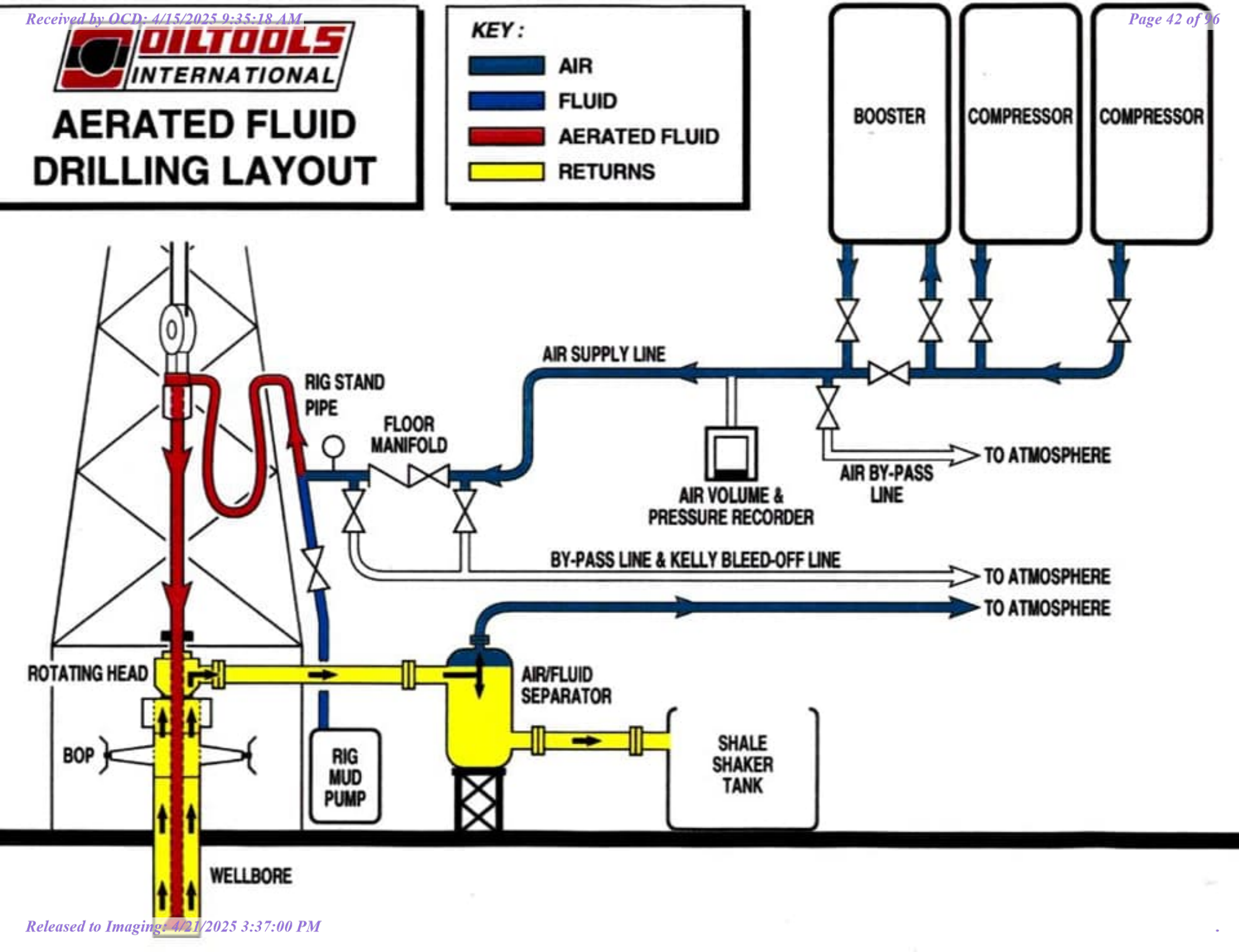
JASON C. EDWARDS
Certificate Number 15269



OILTOOLS INTERNATIONAL

AERATED FLUID DRILLING LAYOUT

KEY :
- AIR
- FLUID
- AERATED FLUID
- RETURNS



San Juan County, NM Allison 602 Federal Com 605H

Hilcorp Energy Company

Technical Drilling Plan (Rev. 0)

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:	April 1, 2024	**Pool:**	Mancos
Well Name:	Allison 602 Federal Com 605H	**Ground Elevation (ft. MSL):**	6,564’
Surface Hole Location:	36.9894590° N, -107.5198460° W	**Total Measured Depth (ft.)**	20,265’
Bottom Hole Location:	36.9858913° N, -107.4729533° W	**County, State:**	San Juan County, NM

Note: All depths in the directional drilling plan are referenced from an estimated RKB datum of 17’ 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

3. Pressure Control 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.

- BOP Testing: The BOPE will be tested to **250 psi (Low) for 5 minutes and 5,000 psi (High) for 10 minutes.** Pressure test **surface casing to 600 psi for 30 minutes** and **intermediate casing to 1,500 psi for 30 minutes.** Utilize a BOPE Testing Unit with a recording chart and appropriate test plug for testing. BOP equipment will be tested upon installation, every 30 days, and after any repairs are made to the BOP equipment. Annular preventors will be functionally tested at least once per week. Pipe and blind rams will be function tested each trip. **The New Mexico Oil & Gas Conservation Division and the BLM will be notified 24 hours in advance of testing BOPE**. All tests and inspections will be recorded and logged with time and results. A full BOP 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 of 30-day intervals. A BOPE shell 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.

4. Casing & Cement 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**	**Yield**	**Joint Strength**
Surface	17-1/2”	13-3/8”	54.5#, J55 or equiv, LTC/BTC	0’	350’ / 350’	1,130 psi	2,730 psi	514,000 lbs
Intermediate	12-1/4”	9-5/8”	43.5# L80 or equiv, LTC/BTC	0’	6,443’ / 6,326’	3,810 psi	6,330 psi	737,000 lbs
Production	8-1/2”	5-1/2”	20.0#, P110 or equiv, LTC/BTC	0’	20,265’ / 7,131’	11,080 psi	12,360 psi	548,000 lbs

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	44.7	47.7
Intermediate	1.67	1.21	3.6	2.9
Production	2.8	3.0	1.6	1.6

Notes:

- Production casing will be run from surface to TD.
- If the 8-1/2" hole is not drilled to the total planned measured depth, the production casing setting depth and length will be adjusted accordingly.
- Casing Design Parameters – Designed for full evacuation. Mud Weights used for calculations: Surface = 9.0 ppg, Intermediate = 11.5 ppg, Production = 12.0 ppg. Burst: 1.15; Collapse: 1.125; Tensile: 1.6.
    - Burst: (Casing Burst Rating) / (Maximum Burst Load (Max MW x TVD x .052))
    - Collapse: (Full hydrostatic of MW in annulus) – (Hydrostatic of vacated casing, 0.1 psi/ft)
    - Tensile: (Tensile rating) / (measured depth x casing weight)
- A toe initiation sliding sleeve will be installed at the toe of the production casing.

B. Proposed Centralizer Program:

Proposed Centralizer Program	
Interval	**Centralizers & Placement**
Surface	1 centralizer per joint on bottom 3 joints.
Intermediate	1 centralizer per joint in shoe track. 1 centralizer every 3rd joint to surface.
Production	Centralizers determined by hole conditions from TD to top of cement.

C. Proposed Cement Program:

Proposed Cement Design							
Interval	**Depth (ft. MD)**	**Lead/Tail**	**Volume (ft^3)**	**Sacks**	**Slurry**	**Density**	**Planned TOC**
Surface	350'	Tail	486 ft^3	414	Premium Cement – 100% Excess 2% CaCl, 0.125 lb/sk Poly E Flake 1.175 ft^3/sk – 5.14 gal/sk	15.8 ppg	Surface
Intermediate	6,443'	Lead	1,947 ft^3	987	HalCem Cement – 25% Excess 0.3% HR-5, 0.125 lb/sk Poly E Flake 1.974 ft^3/sk – 10.28 gal/sk	12.3 ppg	Surface
		Tail	565 ft^3	436	VariCem Cement – 25 % Excess 0.1% HR-5, 0.125 lb/sk Poly E Flake 1.295 ft^3/sk – 5.69 gal/sk	13.5 ppg	5,000'
Production	20,265'	Lead	3,859 ft^3	2,864	BondCem Cement – 10% Excess 0.3% Super CBL, 0.1% HR-601 1.356 ft^3/sk – 6.08 gal/sk	13.3 ppg	5,000'

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).

5. 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’ – 350’
Intermediate	LSND / Gel	8.4 – 10.0	<6	N/A	350’ – 6,443’
Production	Oil Base Mud	10.0 – 12.0	6 – 8	70/30 – 75/25	6,443’ – 20,265’

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: 1,962 bbls (11,010 ft^3).

6. 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.

7. Pilot Hole

No pilot hole for this wellbore.

8. Testing, Logging, Coring

A. Mud Logging

- Mud loggers will collect formation samples every 30'-90' from surface 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 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 temperature survey or a cement bod log will be run to verify top of cement.

9. 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.

10. Completion

A. Pressure Testing

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

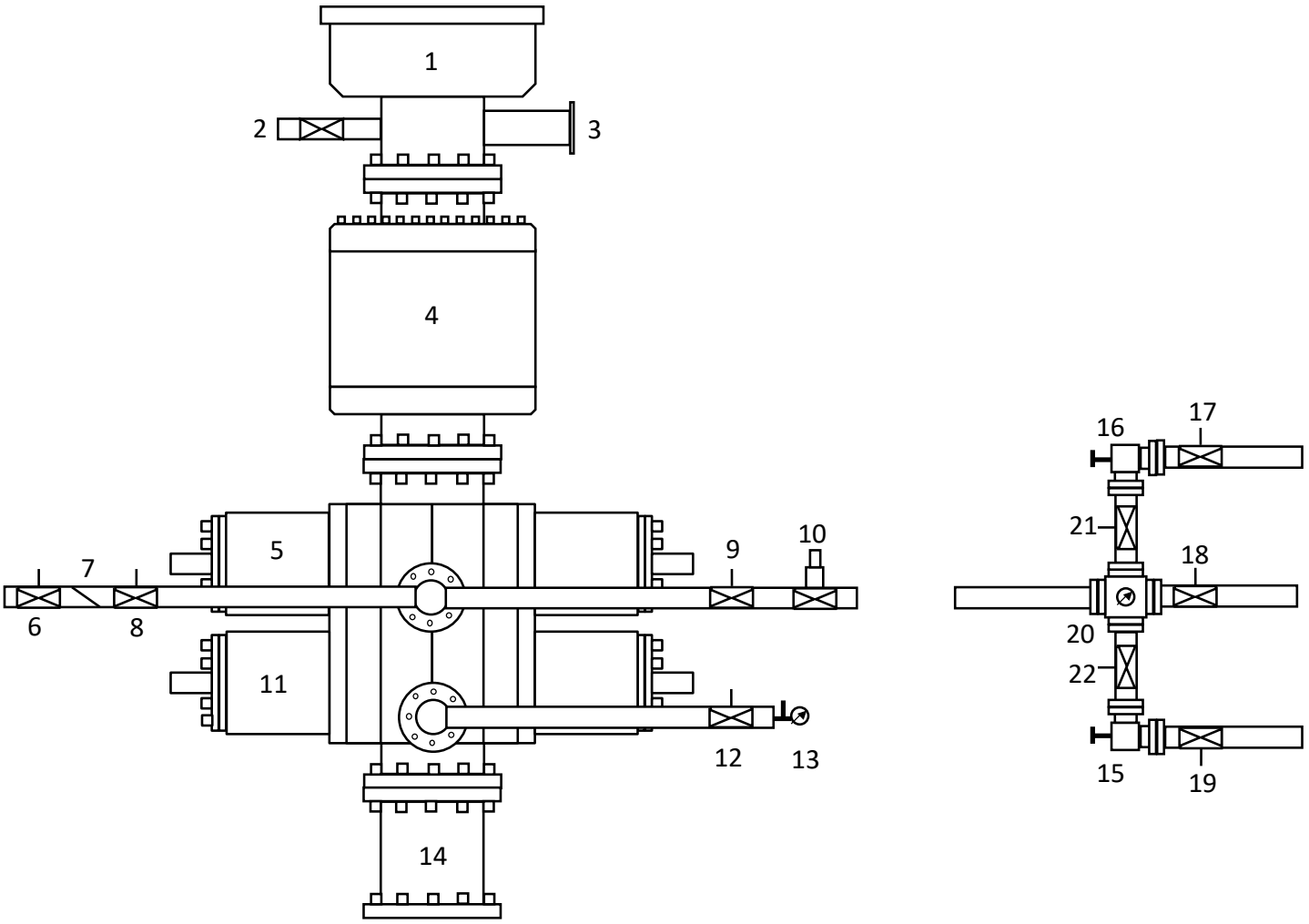
B. Stimulation

- 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.

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: Hilcorp Energy Company **OGRID:** 372171 **Date:** 4/18/2024

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Allison 601 Federal Com 601H				0	20,000	1,000
Allison 601 Federal Com 602H				0	20,000	1,000
Allison 601 Federal Com 603H				0	20,000	1,000
Allison 601 Federal Com 604H				0	20,000	1,000
Allison 602 Federal Com 605H				0	20,000	1,000
Allison 602 Federal Com 606H				0	20,000	1,000
Allison 701 Federal Com 607H				0	20,000	1,000
Allison 701 Federal Com 608H				0	20,000	1,000

IV. Central Delivery Point Name: Milagro/Ignacio Gas Plant [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Allison 601 Federal Com 601H						**2025**
Allison 601 Federal Com 602H						**2025**
Allison 601 Federal Com 603H						**2025**
Allison 601 Federal Com 604H						**2025**
Allison 602 Federal Com 605H						**2025**
Allison 602 Federal Com 606H						**2025**
Allison 701 Federal Com 607H						**2025**
Allison 701 Federal Com 608H						**2025**

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: 
Printed Name: Amanda Walker
Title: Operations/Regulatory Tech Sr.
E-mail Address: mwalker@hilcorp.com
Date: 4/18/2024
Phone: 346-237-2177

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

Hilcorp Energy Natural Gas Management Plan Attachments

VI. Separation Equipment

The operator will select separation equipment for the maximum anticipated throughput and pressure to optimize gas capture. Separation equipment is sized according to manufacturer's design specifications. Separation vessels are built following the A.S.M.E. section VII division 1 codes for pressure vessel design, fabrication, inspection, testing and certification. Anticipated well pressures and production rates are evaluated to select separation equipment according to the equipment's designed operating pressure and throughput.

After completion, the operator utilizes flowback equipment, including separators, to manage wellbore fluids and solids during the initial separation period. After the initial flowback period is complete the operator utilizes iterative facility separation equipment to ensure that optimal separation is achieved.

VII. Operational Practices 19.15.27.8 NMAC A through F

A. The operator will maximize the recovery of natural gas and minimize the amount of gas vented or flared when technically and safely feasible as further described and detailed within the following subsections (B-F of 19.15.27.8). In all cases where natural gas venting and flaring requires regulatory reporting, reporting will be submitted accurately and within the required time frames.
B. Venting and flaring during drilling operations:
    a. New Drill HZ Gas Wells: The operator drills wells in the area by utilizing a balanced mud to safely drill the wellbore. This technique prevents gas from coming to surface during the drilling process. If there is an emergency or malfunction and natural gas does come to surface the natural gas will be captured and routed to sales if technically and safely feasible.
C. Venting and flaring during completion or recompletion operations:
    a. New Drill HZ Gas Wells: The operator's facilities are designed to handle the maximum throughput and pressures from the newly drilled and completed wellbores. The amount of gas vented and flared will be minimized when technically and safely feasible. During initial flowback and initial separation flowback the operator will utilize contracted flowback equipment, including separators, to manage wellbore fluids and solids. The initial flowback period will be minimized and flow will be sent to separation equipment as soon as possible to reduce the amount of gas that is vented to atmosphere. The natural gas will be utilized on site as needed for fuel gas and natural gas will be sold.

D. Venting and flaring during production operations:
    a. New Drill HZ Gas Wells: The operator's facilities are designed to handle the maximum throughput and pressures from producing wellbores. The amount of gas vented and flared will be minimized when technically and safely feasible.

    Operations will effectively manage the following scenarios to minimize the quantity of natural gas that is vented or flared:

(a) If there is an emergency or malfunction vented or flared natural gas will be reported, if required, and the emergency or malfunction will be resolved as soon as technically and safely feasible.
(b) If the wellbore needs to be unloaded to atmosphere the operator will not vent the well after the well has achieved a stabilized rate and pressure. The operator will remain on site during unloading. Plunger lift systems will be optimized to reduce the amount of natural gas venting. Downhole maintenance, such as workovers, swabbing, etc. will only be conducted as needed and best management practices will be utilized to reduce venting of natural gas.
(c) The operator will minimize the amount of time that natural gas is vented to atmosphere from gauging and sampling a storage tank or low pressure vessel. The formation is only anticipated to produce water and therefore tank emissions are anticipated to be negligible.
(d) The operator will reduce the amount of time needed for loading out liquids from a storage tanks or other low-pressure vessels whenever feasible. Operations will always utilize the water transfer systems when available. Water loading emissions are anticipated to be negligible.
(e) Equipment will be repaired and maintained routinely to minimize the venting or flaring of natural gas. Repairs and maintenance will be conducted in a manner that minimizes the amount of natural gas vented to atmosphere through the isolation of the equipment that is being repaired or maintained.
(f) Electric controllers and pumps will be installed to replace pneumatic controllers whenever feasible. Pneumatic controllers and pumps will be inspected frequently to ensure that no excess gas is vented to atmosphere.
(g) No dehydration or amine units are anticipated to be set on location.
(h) Compressors, compressor engines, turbines, flanges, connectors, valves, storage tanks, and other low-pressure vessels and flanges will be routinely inspected to ensure that no excess venting occurs outside of normal operations.
(i) Regulatory required testing, such as bradenhead and packer testing will be performed in a manner that minimizes the amount of natural gas vented to atmosphere.
(j) If natural gas does not meet gathering pipeline specifications gas samples will be collected twice per week to determine when pipeline specification gas content has been achieved. During this time frame gas will be flared and not vented to atmosphere. Natural gas that meets pipeline specifications will be sold via pipeline and natural gas that can be utilized for fuel gas will be used during this time.
(k) If pipeline, equipment, or facilities need purged of impurities gas losses will be minimized as much as technically and safely feasible.

E. Performance standards:

a. The production facilities are designed to handle the maximum throughput and pressures from producing wellbores and will be designed to minimize waste. The amount of gas vented and flared will be minimized when technically and safely feasible.
b. All tanks that are routed to a control device that is installed after 5/25/2021 will have an automatic gauging system to minimize the amount of vented natural gas.
c. If a flare stack is installed or replaced after 5/25/2021 it will be equipped with an automatic ignitor or continuous pilot. The flare stack will be properly sized and designed to ensure proper combustion efficiency. The flare stack will be located 100 feet away from the nearest wellhead or storage tank.
d. AVO inspections will be conducted weekly for the year after completion and for all wells producing greater than 60,000 cubic feet of natural gas daily. The AVO inspection will include all components, including flare stacks, thief hatches, closed vent systems, pumps, compressors, pressure relief devices, valves, lines, flanges, connectors, and associated pipeline to identify any leaks and releases by comprehensive auditory, visual, and olfactory inspection. The AVO inspection records will be maintained for 5 years which will be available at the department's request. Identified leaks will be repaired as soon as feasible to minimize the amount of vented natural gas. F. Measurement or estimation of vented and flared natural gas.

a. The volume of natural gas that is vented, flared or consumed for beneficial use will be measured when possible, or estimated, during drilling, completions, or production operations.
b. Equipment will be installed to measure the volume of natural gas flared for all APD's issued after 5/25/2021 on facilities that will have an average daily gas rate greater than 60,000 cubic feet of natural gas. Measurement equipment will conform to API MPMS Chapter 14.10 regulations. The measurement equipment will not have a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment. If metering is not practical then the volume of gas will be estimated.

Company: Hilcorp Energy Corp.
Project: San Juan, NM NAD27
Site: Allison Unit 601 / 701 Pad
Well: Allison 602 Federal Com 605H
Wellbore: OH
Design: Plan #3

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
System Datum: Mean Sea Level
Local North: True

LONESTAR CONSULTING

WELL DETAILS: Allison 602 Federal Com 605H

GL 6564' & RKB 17' @ 6581.00ft

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	2179582.81	591555.84	36.9894590	-107.5198460A03

Plan: Plan #3 (Allison 602 Federal Com 605H/OH)

Created By: Janie Collins Date: 13:45, March 27 2024

Azimuths to True North
Magnetic North: 8.[illegible]°

Magnetic Field
Strength: 49371.[illegible]nT
Dip Angle: 63.[illegible]°
Date: 3/26/2024
Model: HDGM2024

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
AFC602 605H LP Rev2	7091.00	-1245.27	1015.47	2178340.90	592575.40	36.9860385	-107.5163692
AFC602 605H BHL Rev1	7131.00	-1295.51	13696.10	2178332.40	605256.10	36.9858913	-107.4729533

SECTION DETAILS

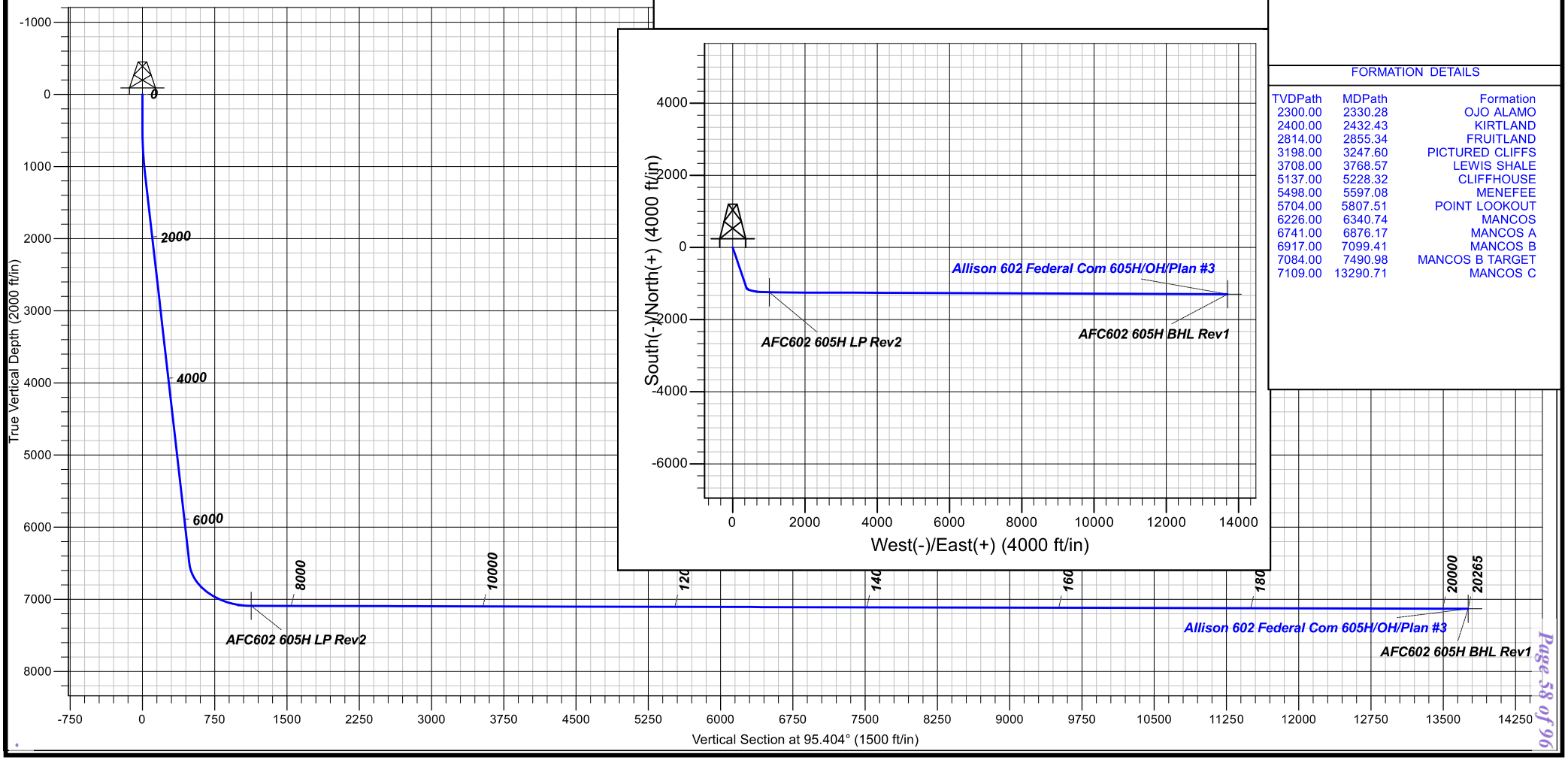
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00
1088.99	11.78	161.262	1084.85	-57.14	19.38	2.00	161.26	24.68
6628.59	11.78	161.262	6507.78	-1128.11	382.68	0.00	0.00	487.21
7584.35	89.82	90.227	7091.00	-1245.27	1015.47	9.00	-71.44	1128.22
20265.14	89.82	90.227	7131.00	-1295.51	13696.10	0.00	0.00	13757.23

CASING DETAILS

No casing data is available

FORMATION DETAILS

TVDPath	MDPath	Formation
2300.00	2330.28	OJO ALAMO
2400.00	2432.43	KIRTLAND
2814.00	2855.34	FRUITLAND
3198.00	3247.60	PICTURED CLIFFS
3708.00	3768.57	LEWIS SHALE
5137.00	5228.32	CLIFFHOUSE
5498.00	5597.08	MENEFEE
5704.00	5807.51	POINT LOOKOUT
6226.00	6340.74	MANCOS
6741.00	6876.17	MANCOS A
6917.00	7099.41	MANCOS B
7084.00	7490.98	MANCOS B TARGET
7109.00	13290.71	MANCOS C



Hilcorp Energy Corp.

San Juan, NM NAD27
Allison Unit 601 / 701 Pad
Allison 602 Federal Com 605H - Slot A03

OH

Plan: Plan #3

Standard Planning Report

27 March, 2024

Lonestar Consulting, LLC

Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot A03
Company:	Hilcorp Energy Corp.	**TVD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Project:	San Juan, NM NAD27	**MD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Site:	Allison Unit 601 / 701 Pad	**North Reference:**	True
Well:	Allison 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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:**	2,179,734.79 usft	**Latitude:**	36.9898780
From:	Lat/Long	**Easting:**	591,382.74 usft	**Longitude:**	-107.5204370
Position Uncertainty:	0.00 ft	**Slot Radius:**	13.20 in		

Well Allison 602 Federal Com 605H - Slot A03

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,179,582.81 usft	**Latitude:**	36.9894590
	+E/-W	0.00 ft	**Easting:**	591,555.84 usft	**Longitude:**	-107.5198460
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,564.00 ft
Grid Convergence:		0.19 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	3/26/2024	8.60	63.33	49,371.80000000

Design Plan #3

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	95.404

Plan Survey Tool Program **Date** 3/27/2024

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	20,265.14	Plan #3 (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	
1,088.99	11.78	161.262	1,084.85	-57.14	19.38	2.00	2.00	0.00	161.26	
6,628.59	11.78	161.262	6,507.78	-1,128.11	382.68	0.00	0.00	0.00	0.00	
7,584.35	89.82	90.227	7,091.00	-1,245.27	1,015.47	9.00	8.17	-7.43	-71.44	AFC602 605H LP Rev
20,265.14	89.82	90.227	7,131.00	-1,295.51	13,696.10	0.00	0.00	0.00	0.00	AFC602 605H BHL R

Lonestar Consulting, LLC

Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot A03
Company:	Hilcorp Energy Corp.	**TVD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Project:	San Juan, NM NAD27	**MD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Site:	Allison Unit 601 / 701 Pad	**North Reference:**	True
Well:	Allison 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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	2.00	161.262	599.98	-1.65	0.56	0.71	2.00	2.00	0.00
700.00	4.00	161.262	699.84	-6.61	2.24	2.85	2.00	2.00	0.00
800.00	6.00	161.262	799.45	-14.86	5.04	6.42	2.00	2.00	0.00
900.00	8.00	161.262	898.70	-26.40	8.96	11.40	2.00	2.00	0.00
1,000.00	10.00	161.262	997.47	-41.22	13.98	17.80	2.00	2.00	0.00
1,088.99	11.78	161.262	1,084.85	-57.14	19.38	24.68	2.00	2.00	0.00
1,100.00	11.78	161.262	1,095.63	-59.26	20.10	25.60	0.00	0.00	0.00
1,200.00	11.78	161.262	1,193.52	-78.60	26.66	33.95	0.00	0.00	0.00
1,300.00	11.78	161.262	1,291.42	-97.93	33.22	42.29	0.00	0.00	0.00
1,400.00	11.78	161.262	1,389.31	-117.26	39.78	50.64	0.00	0.00	0.00
1,500.00	11.78	161.262	1,487.20	-136.60	46.34	58.99	0.00	0.00	0.00
1,600.00	11.78	161.262	1,585.10	-155.93	52.89	67.34	0.00	0.00	0.00
1,700.00	11.78	161.262	1,682.99	-175.26	59.45	75.69	0.00	0.00	0.00
1,800.00	11.78	161.262	1,780.89	-194.60	66.01	84.04	0.00	0.00	0.00
1,900.00	11.78	161.262	1,878.78	-213.93	72.57	92.39	0.00	0.00	0.00
2,000.00	11.78	161.262	1,976.67	-233.26	79.13	100.74	0.00	0.00	0.00
2,100.00	11.78	161.262	2,074.57	-252.59	85.69	109.09	0.00	0.00	0.00
2,200.00	11.78	161.262	2,172.46	-271.93	92.24	117.44	0.00	0.00	0.00
2,300.00	11.78	161.262	2,270.35	-291.26	98.80	125.79	0.00	0.00	0.00
2,400.00	11.78	161.262	2,368.25	-310.59	105.36	134.14	0.00	0.00	0.00
2,500.00	11.78	161.262	2,466.14	-329.93	111.92	142.49	0.00	0.00	0.00
2,600.00	11.78	161.262	2,564.04	-349.26	118.48	150.84	0.00	0.00	0.00
2,700.00	11.78	161.262	2,661.93	-368.59	125.03	159.19	0.00	0.00	0.00
2,800.00	11.78	161.262	2,759.82	-387.93	131.59	167.54	0.00	0.00	0.00
2,900.00	11.78	161.262	2,857.72	-407.26	138.15	175.89	0.00	0.00	0.00
3,000.00	11.78	161.262	2,955.61	-426.59	144.71	184.24	0.00	0.00	0.00
3,100.00	11.78	161.262	3,053.51	-445.92	151.27	192.59	0.00	0.00	0.00
3,200.00	11.78	161.262	3,151.40	-465.26	157.83	200.94	0.00	0.00	0.00
3,300.00	11.78	161.262	3,249.29	-484.59	164.38	209.29	0.00	0.00	0.00
3,400.00	11.78	161.262	3,347.19	-503.92	170.94	217.64	0.00	0.00	0.00
3,500.00	11.78	161.262	3,445.08	-523.26	177.50	225.99	0.00	0.00	0.00
3,600.00	11.78	161.262	3,542.98	-542.59	184.06	234.34	0.00	0.00	0.00
3,700.00	11.78	161.262	3,640.87	-561.92	190.62	242.69	0.00	0.00	0.00
3,800.00	11.78	161.262	3,738.76	-581.25	197.17	251.04	0.00	0.00	0.00
3,900.00	11.78	161.262	3,836.66	-600.59	203.73	259.38	0.00	0.00	0.00
4,000.00	11.78	161.262	3,934.55	-619.92	210.29	267.73	0.00	0.00	0.00
4,100.00	11.78	161.262	4,032.45	-639.25	216.85	276.08	0.00	0.00	0.00
4,200.00	11.78	161.262	4,130.34	-658.59	223.41	284.43	0.00	0.00	0.00
4,300.00	11.78	161.262	4,228.23	-677.92	229.97	292.78	0.00	0.00	0.00
4,400.00	11.78	161.262	4,326.13	-697.25	236.52	301.13	0.00	0.00	0.00
4,500.00	11.78	161.262	4,424.02	-716.59	243.08	309.48	0.00	0.00	0.00
4,600.00	11.78	161.262	4,521.92	-735.92	249.64	317.83	0.00	0.00	0.00
4,700.00	11.78	161.262	4,619.81	-755.25	256.20	326.18	0.00	0.00	0.00
4,800.00	11.78	161.262	4,717.70	-774.58	262.76	334.53	0.00	0.00	0.00
4,900.00	11.78	161.262	4,815.60	-793.92	269.32	342.88	0.00	0.00	0.00
5,000.00	11.78	161.262	4,913.49	-813.25	275.87	351.23	0.00	0.00	0.00
5,100.00	11.78	161.262	5,011.39	-832.58	282.43	359.58	0.00	0.00	0.00

Hilcorp Energy Company

Lonestar Consulting, LLC

Planning Report

LONESTAR CONSULTING

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot A03
Company:	Hilcorp Energy Corp.	**TVD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Project:	San Juan, NM NAD27	**MD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Site:	Allison Unit 601 / 701 Pad	**North Reference:**	True
Well:	Allison 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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	11.78	161.262	5,109.28	-851.92	288.99	367.93	0.00	0.00	0.00
5,300.00	11.78	161.262	5,207.17	-871.25	295.55	376.28	0.00	0.00	0.00
5,400.00	11.78	161.262	5,305.07	-890.58	302.11	384.63	0.00	0.00	0.00
5,500.00	11.78	161.262	5,402.96	-909.92	308.66	392.98	0.00	0.00	0.00
5,600.00	11.78	161.262	5,500.86	-929.25	315.22	401.33	0.00	0.00	0.00
5,700.00	11.78	161.262	5,598.75	-948.58	321.78	409.68	0.00	0.00	0.00
5,800.00	11.78	161.262	5,696.64	-967.91	328.34	418.03	0.00	0.00	0.00
5,900.00	11.78	161.262	5,794.54	-987.25	334.90	426.38	0.00	0.00	0.00
6,000.00	11.78	161.262	5,892.43	-1,006.58	341.46	434.73	0.00	0.00	0.00
6,100.00	11.78	161.262	5,990.33	-1,025.91	348.01	443.08	0.00	0.00	0.00
6,200.00	11.78	161.262	6,088.22	-1,045.25	354.57	451.43	0.00	0.00	0.00
6,300.00	11.78	161.262	6,186.11	-1,064.58	361.13	459.78	0.00	0.00	0.00
6,400.00	11.78	161.262	6,284.01	-1,083.91	367.69	468.13	0.00	0.00	0.00
6,500.00	11.78	161.262	6,381.90	-1,103.25	374.25	476.48	0.00	0.00	0.00
6,600.00	11.78	161.262	6,479.80	-1,122.58	380.80	484.82	0.00	0.00	0.00
6,628.59	11.78	161.262	6,507.78	-1,128.11	382.68	487.21	0.00	0.00	0.00
6,700.00	15.09	137.209	6,577.28	-1,141.84	391.34	497.13	9.00	4.64	-33.68
6,800.00	22.12	119.222	6,672.07	-1,160.63	416.67	524.12	9.00	7.03	-17.99
6,900.00	30.18	110.019	6,761.80	-1,178.46	456.81	565.75	9.00	8.06	-9.20
7,000.00	38.63	104.483	6,844.25	-1,194.91	510.75	621.01	9.00	8.45	-5.54
7,100.00	47.25	100.697	6,917.40	-1,209.56	577.19	688.53	9.00	8.63	-3.79
7,200.00	55.97	97.845	6,979.45	-1,222.06	654.48	766.65	9.00	8.72	-2.85
7,300.00	64.75	95.531	7,028.86	-1,232.09	740.72	853.46	9.00	8.77	-2.31
7,400.00	73.55	93.530	7,064.42	-1,239.42	833.79	946.80	9.00	8.80	-2.00
7,500.00	82.37	91.705	7,085.26	-1,243.85	931.38	1,044.38	9.00	8.82	-1.83
7,584.35	89.82	90.227	7,091.00	-1,245.27	1,015.47	1,128.22	9.00	8.83	-1.75
7,600.00	89.82	90.227	7,091.05	-1,245.33	1,031.12	1,143.81	0.00	0.00	0.00
7,700.00	89.82	90.227	7,091.36	-1,245.73	1,131.11	1,243.40	0.00	0.00	0.00
7,800.00	89.82	90.227	7,091.68	-1,246.12	1,231.11	1,342.99	0.00	0.00	0.00
7,900.00	89.82	90.227	7,092.00	-1,246.52	1,331.11	1,442.58	0.00	0.00	0.00
8,000.00	89.82	90.227	7,092.31	-1,246.91	1,431.11	1,542.17	0.00	0.00	0.00
8,100.00	89.82	90.227	7,092.63	-1,247.31	1,531.11	1,641.76	0.00	0.00	0.00
8,200.00	89.82	90.227	7,092.94	-1,247.71	1,631.11	1,741.36	0.00	0.00	0.00
8,300.00	89.82	90.227	7,093.26	-1,248.10	1,731.11	1,840.95	0.00	0.00	0.00
8,400.00	89.82	90.227	7,093.57	-1,248.50	1,831.10	1,940.54	0.00	0.00	0.00
8,500.00	89.82	90.227	7,093.89	-1,248.90	1,931.10	2,040.13	0.00	0.00	0.00
8,600.00	89.82	90.227	7,094.20	-1,249.29	2,031.10	2,139.72	0.00	0.00	0.00
8,700.00	89.82	90.227	7,094.52	-1,249.69	2,131.10	2,239.31	0.00	0.00	0.00
8,800.00	89.82	90.227	7,094.83	-1,250.08	2,231.10	2,338.91	0.00	0.00	0.00
8,900.00	89.82	90.227	7,095.15	-1,250.48	2,331.10	2,438.50	0.00	0.00	0.00
9,000.00	89.82	90.227	7,095.47	-1,250.88	2,431.10	2,538.09	0.00	0.00	0.00
9,100.00	89.82	90.227	7,095.78	-1,251.27	2,531.10	2,637.68	0.00	0.00	0.00
9,200.00	89.82	90.227	7,096.10	-1,251.67	2,631.09	2,737.27	0.00	0.00	0.00
9,300.00	89.82	90.227	7,096.41	-1,252.07	2,731.09	2,836.86	0.00	0.00	0.00
9,400.00	89.82	90.227	7,096.73	-1,252.46	2,831.09	2,936.46	0.00	0.00	0.00
9,500.00	89.82	90.227	7,097.04	-1,252.86	2,931.09	3,036.05	0.00	0.00	0.00
9,600.00	89.82	90.227	7,097.36	-1,253.25	3,031.09	3,135.64	0.00	0.00	0.00
9,700.00	89.82	90.227	7,097.67	-1,253.65	3,131.09	3,235.23	0.00	0.00	0.00
9,800.00	89.82	90.227	7,097.99	-1,254.05	3,231.09	3,334.82	0.00	0.00	0.00
9,900.00	89.82	90.227	7,098.30	-1,254.44	3,331.09	3,434.41	0.00	0.00	0.00
10,000.00	89.82	90.227	7,098.62	-1,254.84	3,431.08	3,534.00	0.00	0.00	0.00
10,100.00	89.82	90.227	7,098.94	-1,255.24	3,531.08	3,633.60	0.00	0.00	0.00
10,200.00	89.82	90.227	7,099.25	-1,255.63	3,631.08	3,733.19	0.00	0.00	0.00

Lonestar Consulting, LLC

Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot A03
Company:	Hilcorp Energy Corp.	**TVD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Project:	San Juan, NM NAD27	**MD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Site:	Allison Unit 601 / 701 Pad	**North Reference:**	True
Well:	Allison 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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	89.82	90.227	7,099.57	-1,256.03	3,731.08	3,832.78	0.00	0.00	0.00
10,400.00	89.82	90.227	7,099.88	-1,256.42	3,831.08	3,932.37	0.00	0.00	0.00
10,500.00	89.82	90.227	7,100.20	-1,256.82	3,931.08	4,031.96	0.00	0.00	0.00
10,600.00	89.82	90.227	7,100.51	-1,257.22	4,031.08	4,131.55	0.00	0.00	0.00
10,700.00	89.82	90.227	7,100.83	-1,257.61	4,131.08	4,231.15	0.00	0.00	0.00
10,800.00	89.82	90.227	7,101.14	-1,258.01	4,231.07	4,330.74	0.00	0.00	0.00
10,900.00	89.82	90.227	7,101.46	-1,258.41	4,331.07	4,430.33	0.00	0.00	0.00
11,000.00	89.82	90.227	7,101.77	-1,258.80	4,431.07	4,529.92	0.00	0.00	0.00
11,100.00	89.82	90.227	7,102.09	-1,259.20	4,531.07	4,629.51	0.00	0.00	0.00
11,200.00	89.82	90.227	7,102.41	-1,259.59	4,631.07	4,729.10	0.00	0.00	0.00
11,300.00	89.82	90.227	7,102.72	-1,259.99	4,731.07	4,828.70	0.00	0.00	0.00
11,400.00	89.82	90.227	7,103.04	-1,260.39	4,831.07	4,928.29	0.00	0.00	0.00
11,500.00	89.82	90.227	7,103.35	-1,260.78	4,931.07	5,027.88	0.00	0.00	0.00
11,600.00	89.82	90.227	7,103.67	-1,261.18	5,031.06	5,127.47	0.00	0.00	0.00
11,700.00	89.82	90.227	7,103.98	-1,261.58	5,131.06	5,227.06	0.00	0.00	0.00
11,800.00	89.82	90.227	7,104.30	-1,261.97	5,231.06	5,326.65	0.00	0.00	0.00
11,900.00	89.82	90.227	7,104.61	-1,262.37	5,331.06	5,426.25	0.00	0.00	0.00
12,000.00	89.82	90.227	7,104.93	-1,262.76	5,431.06	5,525.84	0.00	0.00	0.00
12,100.00	89.82	90.227	7,105.24	-1,263.16	5,531.06	5,625.43	0.00	0.00	0.00
12,200.00	89.82	90.227	7,105.56	-1,263.56	5,631.06	5,725.02	0.00	0.00	0.00
12,300.00	89.82	90.227	7,105.88	-1,263.95	5,731.05	5,824.61	0.00	0.00	0.00
12,400.00	89.82	90.227	7,106.19	-1,264.35	5,831.05	5,924.20	0.00	0.00	0.00
12,500.00	89.82	90.227	7,106.51	-1,264.75	5,931.05	6,023.80	0.00	0.00	0.00
12,600.00	89.82	90.227	7,106.82	-1,265.14	6,031.05	6,123.39	0.00	0.00	0.00
12,700.00	89.82	90.227	7,107.14	-1,265.54	6,131.05	6,222.98	0.00	0.00	0.00
12,800.00	89.82	90.227	7,107.45	-1,265.93	6,231.05	6,322.57	0.00	0.00	0.00
12,900.00	89.82	90.227	7,107.77	-1,266.33	6,331.05	6,422.16	0.00	0.00	0.00
13,000.00	89.82	90.227	7,108.08	-1,266.73	6,431.05	6,521.75	0.00	0.00	0.00
13,100.00	89.82	90.227	7,108.40	-1,267.12	6,531.04	6,621.35	0.00	0.00	0.00
13,200.00	89.82	90.227	7,108.71	-1,267.52	6,631.04	6,720.94	0.00	0.00	0.00
13,300.00	89.82	90.227	7,109.03	-1,267.92	6,731.04	6,820.53	0.00	0.00	0.00
13,400.00	89.82	90.227	7,109.34	-1,268.31	6,831.04	6,920.12	0.00	0.00	0.00
13,500.00	89.82	90.227	7,109.66	-1,268.71	6,931.04	7,019.71	0.00	0.00	0.00
13,600.00	89.82	90.227	7,109.98	-1,269.10	7,031.04	7,119.30	0.00	0.00	0.00
13,700.00	89.82	90.227	7,110.29	-1,269.50	7,131.04	7,218.90	0.00	0.00	0.00
13,800.00	89.82	90.227	7,110.61	-1,269.90	7,231.04	7,318.49	0.00	0.00	0.00
13,900.00	89.82	90.227	7,110.92	-1,270.29	7,331.03	7,418.08	0.00	0.00	0.00
14,000.00	89.82	90.227	7,111.24	-1,270.69	7,431.03	7,517.67	0.00	0.00	0.00
14,100.00	89.82	90.227	7,111.55	-1,271.09	7,531.03	7,617.26	0.00	0.00	0.00
14,200.00	89.82	90.227	7,111.87	-1,271.48	7,631.03	7,716.85	0.00	0.00	0.00
14,300.00	89.82	90.227	7,112.18	-1,271.88	7,731.03	7,816.45	0.00	0.00	0.00
14,400.00	89.82	90.227	7,112.50	-1,272.27	7,831.03	7,916.04	0.00	0.00	0.00
14,500.00	89.82	90.227	7,112.81	-1,272.67	7,931.03	8,015.63	0.00	0.00	0.00
14,600.00	89.82	90.227	7,113.13	-1,273.07	8,031.03	8,115.22	0.00	0.00	0.00
14,700.00	89.82	90.227	7,113.45	-1,273.46	8,131.02	8,214.81	0.00	0.00	0.00
14,800.00	89.82	90.227	7,113.76	-1,273.86	8,231.02	8,314.40	0.00	0.00	0.00
14,900.00	89.82	90.227	7,114.08	-1,274.26	8,331.02	8,414.00	0.00	0.00	0.00
15,000.00	89.82	90.227	7,114.39	-1,274.65	8,431.02	8,513.59	0.00	0.00	0.00
15,100.00	89.82	90.227	7,114.71	-1,275.05	8,531.02	8,613.18	0.00	0.00	0.00
15,200.00	89.82	90.227	7,115.02	-1,275.44	8,631.02	8,712.77	0.00	0.00	0.00
15,300.00	89.82	90.227	7,115.34	-1,275.84	8,731.02	8,812.36	0.00	0.00	0.00
15,400.00	89.82	90.227	7,115.65	-1,276.24	8,831.02	8,911.95	0.00	0.00	0.00
15,500.00	89.82	90.227	7,115.97	-1,276.63	8,931.01	9,011.55	0.00	0.00	0.00

Hilcorp Energy Company

Lonestar Consulting, LLC

Planning Report

LONESTAR CONSULTING

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot A03
Company:	Hilcorp Energy Corp.	**TVD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Project:	San Juan, NM NAD27	**MD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Site:	Allison Unit 601 / 701 Pad	**North Reference:**	True
Well:	Allison 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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)
15,600.00	89.82	90.227	7,116.28	-1,277.03	9,031.01	9,111.14	0.00	0.00	0.00
15,700.00	89.82	90.227	7,116.60	-1,277.43	9,131.01	9,210.73	0.00	0.00	0.00
15,800.00	89.82	90.227	7,116.92	-1,277.82	9,231.01	9,310.32	0.00	0.00	0.00
15,900.00	89.82	90.227	7,117.23	-1,278.22	9,331.01	9,409.91	0.00	0.00	0.00
16,000.00	89.82	90.227	7,117.55	-1,278.61	9,431.01	9,509.50	0.00	0.00	0.00
16,100.00	89.82	90.227	7,117.86	-1,279.01	9,531.01	9,609.10	0.00	0.00	0.00
16,200.00	89.82	90.227	7,118.18	-1,279.41	9,631.00	9,708.69	0.00	0.00	0.00
16,300.00	89.82	90.227	7,118.49	-1,279.80	9,731.00	9,808.28	0.00	0.00	0.00
16,400.00	89.82	90.227	7,118.81	-1,280.20	9,831.00	9,907.87	0.00	0.00	0.00
16,500.00	89.82	90.227	7,119.12	-1,280.60	9,931.00	10,007.46	0.00	0.00	0.00
16,600.00	89.82	90.227	7,119.44	-1,280.99	10,031.00	10,107.05	0.00	0.00	0.00
16,700.00	89.82	90.227	7,119.75	-1,281.39	10,131.00	10,206.65	0.00	0.00	0.00
16,800.00	89.82	90.227	7,120.07	-1,281.78	10,231.00	10,306.24	0.00	0.00	0.00
16,900.00	89.82	90.227	7,120.39	-1,282.18	10,331.00	10,405.83	0.00	0.00	0.00
17,000.00	89.82	90.227	7,120.70	-1,282.58	10,430.99	10,505.42	0.00	0.00	0.00
17,100.00	89.82	90.227	7,121.02	-1,282.97	10,530.99	10,605.01	0.00	0.00	0.00
17,200.00	89.82	90.227	7,121.33	-1,283.37	10,630.99	10,704.60	0.00	0.00	0.00
17,300.00	89.82	90.227	7,121.65	-1,283.77	10,730.99	10,804.20	0.00	0.00	0.00
17,400.00	89.82	90.227	7,121.96	-1,284.16	10,830.99	10,903.79	0.00	0.00	0.00
17,500.00	89.82	90.227	7,122.28	-1,284.56	10,930.99	11,003.38	0.00	0.00	0.00
17,600.00	89.82	90.227	7,122.59	-1,284.95	11,030.99	11,102.97	0.00	0.00	0.00
17,700.00	89.82	90.227	7,122.91	-1,285.35	11,130.99	11,202.56	0.00	0.00	0.00
17,800.00	89.82	90.227	7,123.22	-1,285.75	11,230.98	11,302.15	0.00	0.00	0.00
17,900.00	89.82	90.227	7,123.54	-1,286.14	11,330.98	11,401.75	0.00	0.00	0.00
18,000.00	89.82	90.227	7,123.86	-1,286.54	11,430.98	11,501.34	0.00	0.00	0.00
18,100.00	89.82	90.227	7,124.17	-1,286.94	11,530.98	11,600.93	0.00	0.00	0.00
18,200.00	89.82	90.227	7,124.49	-1,287.33	11,630.98	11,700.52	0.00	0.00	0.00
18,300.00	89.82	90.227	7,124.80	-1,287.73	11,730.98	11,800.11	0.00	0.00	0.00
18,400.00	89.82	90.227	7,125.12	-1,288.12	11,830.98	11,899.70	0.00	0.00	0.00
18,500.00	89.82	90.227	7,125.43	-1,288.52	11,930.98	11,999.30	0.00	0.00	0.00
18,600.00	89.82	90.227	7,125.75	-1,288.92	12,030.97	12,098.89	0.00	0.00	0.00
18,700.00	89.82	90.227	7,126.06	-1,289.31	12,130.97	12,198.48	0.00	0.00	0.00
18,800.00	89.82	90.227	7,126.38	-1,289.71	12,230.97	12,298.07	0.00	0.00	0.00
18,900.00	89.82	90.227	7,126.69	-1,290.11	12,330.97	12,397.66	0.00	0.00	0.00
19,000.00	89.82	90.227	7,127.01	-1,290.50	12,430.97	12,497.25	0.00	0.00	0.00
19,100.00	89.82	90.227	7,127.32	-1,290.90	12,530.97	12,596.85	0.00	0.00	0.00
19,200.00	89.82	90.227	7,127.64	-1,291.29	12,630.97	12,696.44	0.00	0.00	0.00
19,300.00	89.82	90.227	7,127.96	-1,291.69	12,730.97	12,796.03	0.00	0.00	0.00
19,400.00	89.82	90.227	7,128.27	-1,292.09	12,830.96	12,895.62	0.00	0.00	0.00
19,500.00	89.82	90.227	7,128.59	-1,292.48	12,930.96	12,995.21	0.00	0.00	0.00
19,600.00	89.82	90.227	7,128.90	-1,292.88	13,030.96	13,094.80	0.00	0.00	0.00
19,700.00	89.82	90.227	7,129.22	-1,293.28	13,130.96	13,194.40	0.00	0.00	0.00
19,800.00	89.82	90.227	7,129.53	-1,293.67	13,230.96	13,293.99	0.00	0.00	0.00
19,900.00	89.82	90.227	7,129.85	-1,294.07	13,330.96	13,393.58	0.00	0.00	0.00
20,000.00	89.82	90.227	7,130.16	-1,294.46	13,430.96	13,493.17	0.00	0.00	0.00
20,100.00	89.82	90.227	7,130.48	-1,294.86	13,530.96	13,592.76	0.00	0.00	0.00
20,200.00	89.82	90.227	7,130.79	-1,295.26	13,630.95	13,692.35	0.00	0.00	0.00
20,265.14	89.82	90.227	7,131.00	-1,295.51	13,696.10	13,757.23	0.00	0.00	0.00

Lonestar Consulting, LLC
Planning Report

Database:	Grand Junction	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot A03
Company:	Hilcorp Energy Corp.	**TVD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Project:	San Juan, NM NAD27	**MD Reference:**	GL 6564' & RKB 17' @ 6581.00ft
Site:	Allison Unit 601 / 701 Pad	**North Reference:**	True
Well:	Allison 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #3		

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
AFC602 605H LP Rev2 - plan hits target center - Point	0.00	0.000	7,091.00	-1,245.27	1,015.47	2,178,340.90	592,575.40	36.9860385	-107.5163693
AFC602 605H BHL Rev - plan hits target center - Point	0.00	0.000	7,131.00	-1,295.51	13,696.10	2,178,332.40	605,256.10	36.9858912	-107.4729533

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,330.28	2,300.00	OJO ALAMO		0.00	0.000
2,432.43	2,400.00	KIRTLAND		0.00	0.000
2,855.34	2,814.00	FRUITLAND		0.00	0.000
3,247.60	3,198.00	PICTURED CLIFFS		0.00	0.000
3,768.57	3,708.00	LEWIS SHALE		0.00	0.000
5,228.32	5,137.00	CLIFFHOUSE		0.00	0.000
5,597.08	5,498.00	MENEFEE		0.00	0.000
5,807.52	5,704.00	POINT LOOKOUT		0.00	0.000
6,340.75	6,226.00	MANCOS		0.00	0.000
6,876.17	6,741.00	MANCOS A		0.00	0.000
7,099.41	6,917.00	MANCOS B		0.00	0.000
7,490.98	7,084.00	MANCOS B TARGET		0.00	0.000
13,290.71	7,109.00	MANCOS C		0.00	0.000

Well Name: ALLISON 602 FEDERAL COM

Well Location: T32N / R07W / SEC 12 / SESW / 36.989463 / -107.520453

County or Parish/State: SAN JUAN / NM

Well Number: 605H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM04207

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: HILCORP ENERGY COMPANY

Notice of Intent

Sundry ID: 2847187

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/15/2025

Time Sundry Submitted: 05:44

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_602_FEDERAL_COM_605H_REVISED_PLAT_20250415054345.PDF

Allison_602_Federal_Com_605H____Drilling_Technical_Plan___Rev_1_20250415054345.pdf

Allison_602_Federal_Com_605H_Plan_7_20250415054344.pdf

Well Name: ALLISON 602 FEDERAL COM

Well Location: T32N / R07W / SEC 12 / SESW / 36.989463 / -107.520453

County or Parish/State: SAN JUAN / NM

Well Number: 605H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM04207

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 05:43 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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

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

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

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
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ 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 recomplete 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 OFICE 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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 / 227 FSL / 1931 FWL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.989463 / LONG: -107.520453 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 17 / LAT: 36.98594 / LONG: -107.490995 (TVD: 7131 feet, MD: 20265 feet)

PPP: LOT 1 / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 18 / LAT: 36.98594 / LONG: -107.490995 (TVD: 7131 feet, MD: 20265 feet)

PPP: NWNE / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 13 / LAT: 36.986026 / LONG: -107.509234 (TVD: 7131 feet, MD: 20265 feet)

PPP: NWNE / 866 FNL / 2276 FEL / TWSP: 32N / RANGE: 07W / SECTION: 13 / LAT: 36.986043 / LONG: -107.516976 (TVD: 7131 feet, MD: 20265 feet)

PPP: NENW / 866 FNL / 0 FEL / TWSP: 32N / RANGE: 06W / SECTION: 17 / LAT: 36.98594 / LONG: -107.490995 (TVD: 7131 feet, MD: 20265 feet)

BHL: NENE / 756 FNL / 247 FEL / TWSP: 32N / RANGE: 06W / SECTION: 17 / LAT: 36.985896 / LONG: -107.473558 (TVD: 7131 feet, MD: 20265 feet)

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
30-045-38449	97232	BASIN MANCOS

Property Code	Property Name	Well Number
337190	ALLISON 602 FEDERAL COM	605H

OGRID No.	Operator Name	Ground Level Elevation
372171	HILCORP ENERGY COMPANY	6563'

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
N	12	32N	7W		248' SOUTH	1786' WEST	36.989578 °N	-107.520942 °W	SAN JUAN

Bottom Hole Location

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
C	16	32N	6W		679' NORTH	2376' WEST	36.985893 °N	-107.464578 °W	SAN JUAN

Dedicated Acres	Penetrated Spacing Unit:	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit	Consolidation Code
958.77	NE/4 - Section 13, T32N, R7W NW/4 - Section 16, T32N, R6W N/2 - Section 17, T32N, R6W Lot 1 & 2, E/2 NW/4, NE/4 - Section 18, T32N, R6W	Defining		☐ Yes ☒ No	Com

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
N	12	32N	7W		248' SOUTH	1786' WEST	36.989578 °N	-107.520942 °W	SAN JUAN

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
B	13	32N	7W		909' NORTH	2566' EAST	36.986043 °N	-107.517970 °W	SAN JUAN

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
C	16	32N	6W		681' NORTH	2306' WEST	36.985894 °N	-107.464819 °W	SAN JUAN

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation
	☒ 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

3/21/2025
Date

Amanda Walker
Printed Name

mwalker@hilcorp.com
E-mail Address

SURVEYOR CERTIFICATION

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

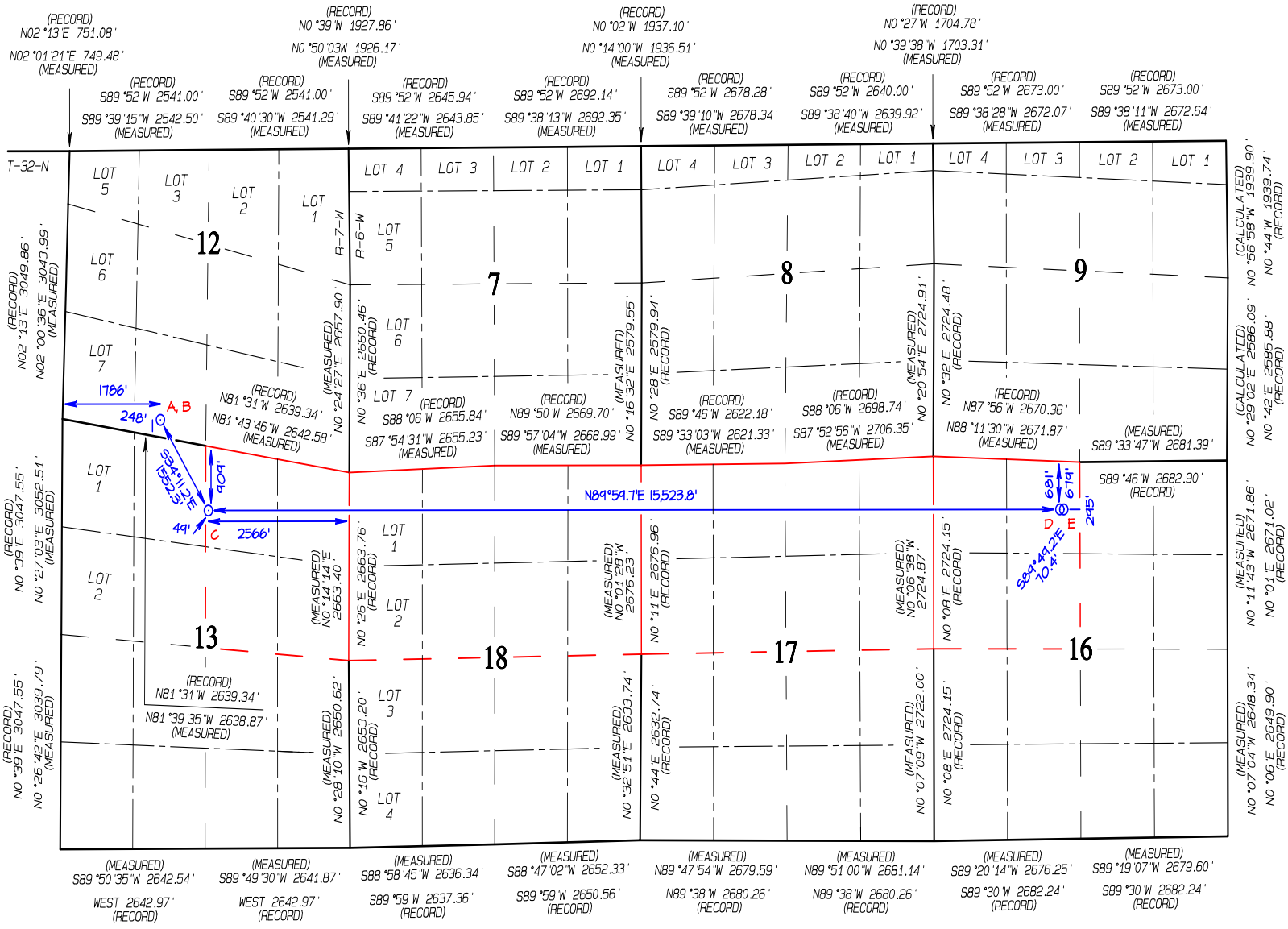
JASON C. EDWARDS
NEW MEXICO
15269
3/20/2025
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS

Signature and Seal of Professional Surveyor

Certificate Number 15269 Date of Survey MARCH 12, 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.



SURFACE LOCATION (A)
248' FSL 1786' FWL
SECTION 12, T32N, R7W
LAT 36.989574°N
LONG -107.520335°W
DATUM: NAD1927

LAT 36.989578°N
LONG -107.520942°W
DATUM: NAD1983

KICK OFF POINT (B)
248' FSL 1786' FWL
SECTION 12, T32N, R7W
LAT 36.989574°N
LONG -107.520335°W
DATUM: NAD1927

LAT 36.989578°N
LONG -107.520942°W
DATUM: NAD1983

FIRST TAKE POINT (C)
909' FNL 2566' FEL
SECTION 13, T32N, R7W
LAT 36.986039N
LONG -107.517363°W
DATUM: NAD1927

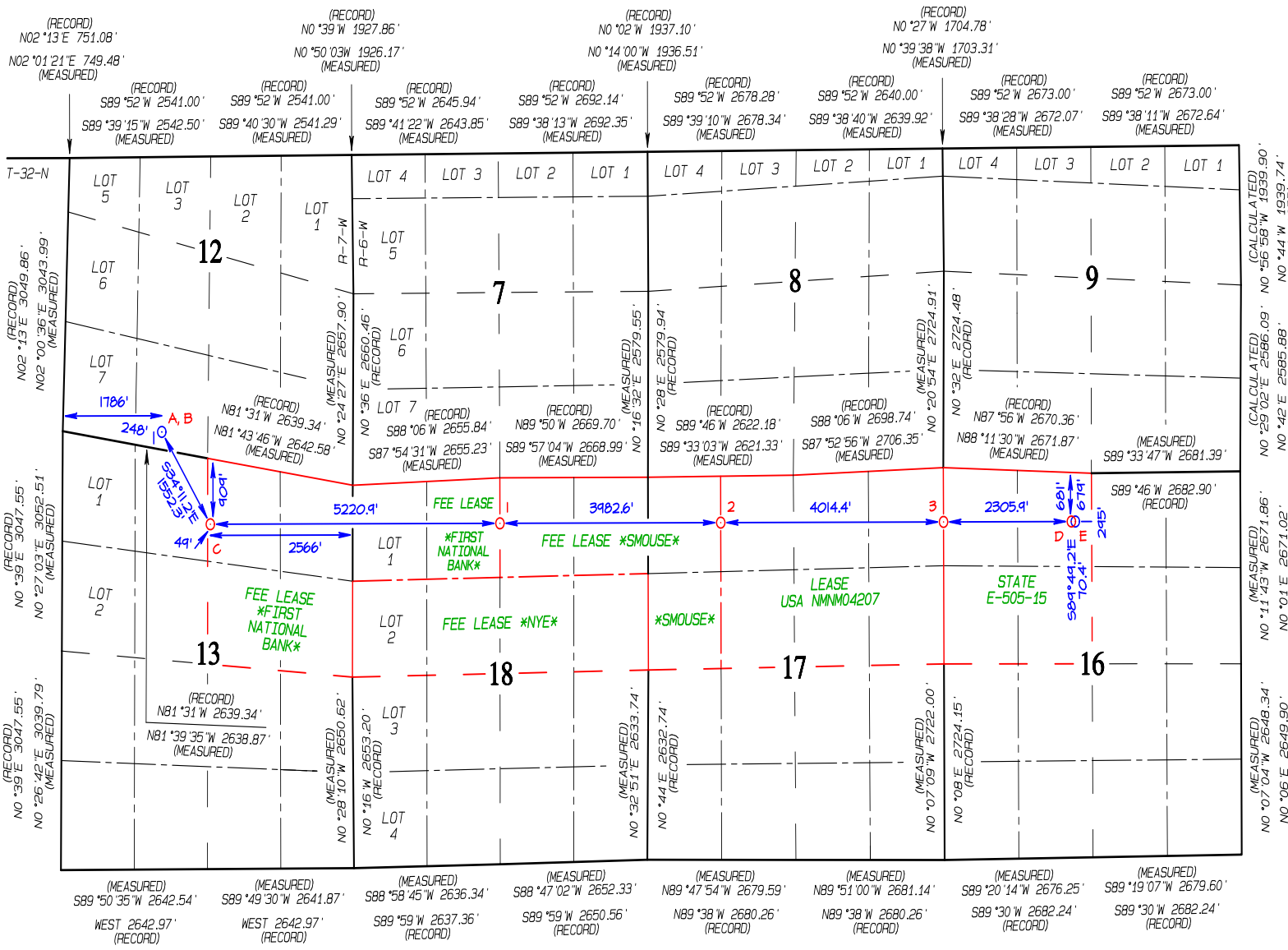
LAT 36.986043°N
LONG -107.517970°W
DATUM: NAD1983

LAST TAKE POINT (D)
681' FNL 2306' FWL
SECTION 16, T32N, R6W
LAT 36.985889°N
LONG -107.464214°W
DATUM: NAD1927

LAT 36.985894°N
LONG -107.464819°W
DATUM: NAD1983

END OF LATERAL (E)
679' FNL 2376' FWL
SECTION 16, T32N, R6W
LAT 36.985887°N
LONG -107.463973°W
DATUM: NAD1927

LAT 36.985893°N
LONG -107.464578°W
DATUM: NAD1983



SURFACE LOCATION (A)
248' FSL 1786' FWL
SECTION 12, T32N, R7W
LAT 36.989574 °N
LONG -107.520335 °W
DATUM: NAD1927

LAT 36.989578 °N
LONG -107.520942 °W
DATUM: NAD1983

FIRST TAKE POINT (C)
909' FNL 2566' FEL
SECTION 13, T32N, R7W
LAT 36.986039N
LONG -107.517363 °W
DATUM: NAD1927

LAT 36.986043 °N
LONG -107.517970 °W
DATUM: NAD1983

LEASE X-ING (1)
632' FNL 2655' FWL
SECTION 18, T32N, R6W
LAT 36.985991 °N
LONG -107.499488 °W
DATUM: NAD1927

LAT 36.985996 °N
LONG -107.500094 °W
DATUM: NAD1983

LEASE X-ING (2)
644' FNL 1313' FWL
SECTION 17, T32N, R6W
LAT 36.985953 °N
LONG -107.485853 °W
DATUM: NAD1927

LAT 36.985958 °N
LONG -107.486458 °W
DATUM: NAD1983

LEASE X-ING (3)
754' FNL 0' FEL
SECTION 17, T32N, R6W
LAT 36.985912 °N
LONG -107.472108 °W
DATUM: NAD1927

LAT 36.985918 °N
LONG -107.472714 °W
DATUM: NAD1983

LAST TAKE POINT (D)
681' FNL 2306' FWL
SECTION 16, T32N, R6W
LAT 36.985889 °N
LONG -107.464214 °W
DATUM: NAD1927

LAT 36.985894 °N
LONG -107.464819 °W
DATUM: NAD1983

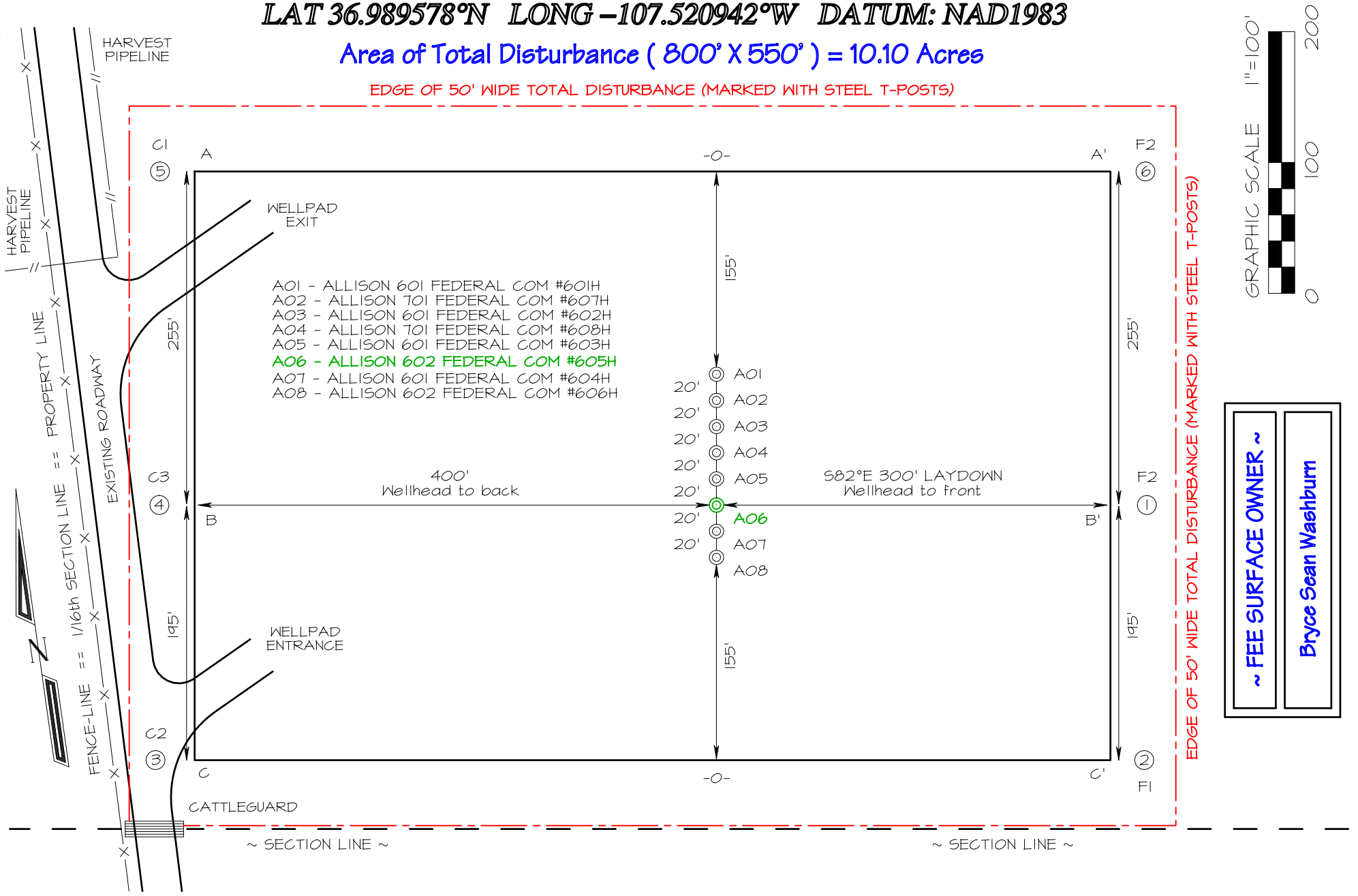
END OF LATERAL (E)
679' FNL 2376' FWL
SECTION 16, T32N, R6W
LAT 36.985887 °N
LONG -107.463973 °W
DATUM: NAD1927

LAT 36.985893 °N
LONG -107.464578 °W
DATUM: NAD1983

HILCORP ENERGY COMPANY ALLISON 602 FEDERAL COM #605H
248' FSL & 1786' FWL, SECTION 12, T32N, R7W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6563'
LAT 36.989578°N LONG -107.520942°W DATUM: NAD1983

Area of Total Disturbance (800' X 550') = 10.10 Acres

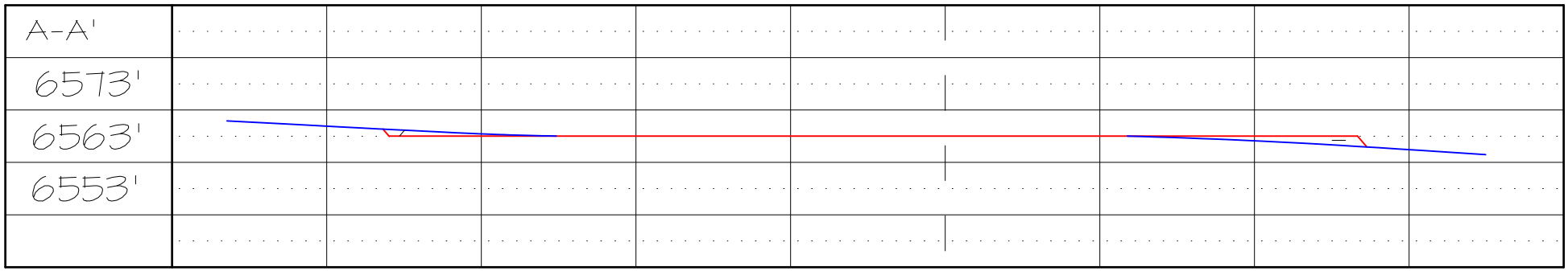
EDGE OF 50' WIDE TOTAL DISTURBANCE (MARKED WITH STEEL T-POSTS)

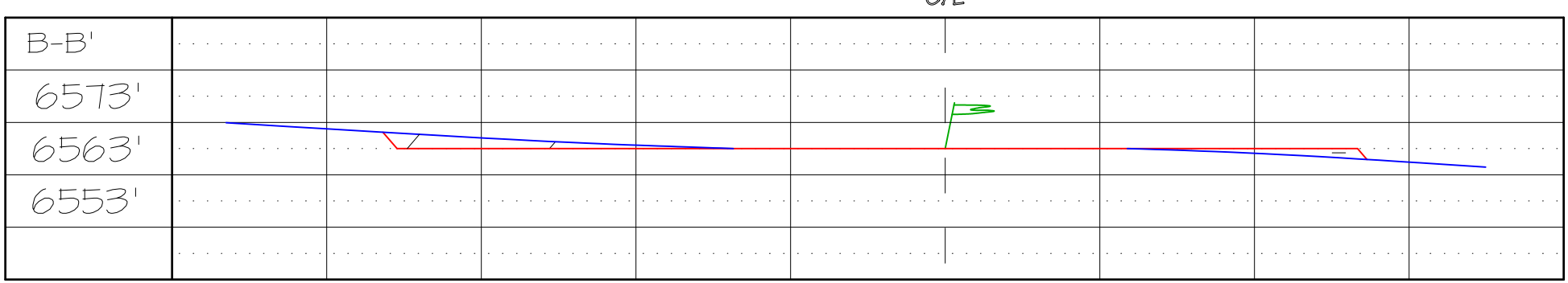


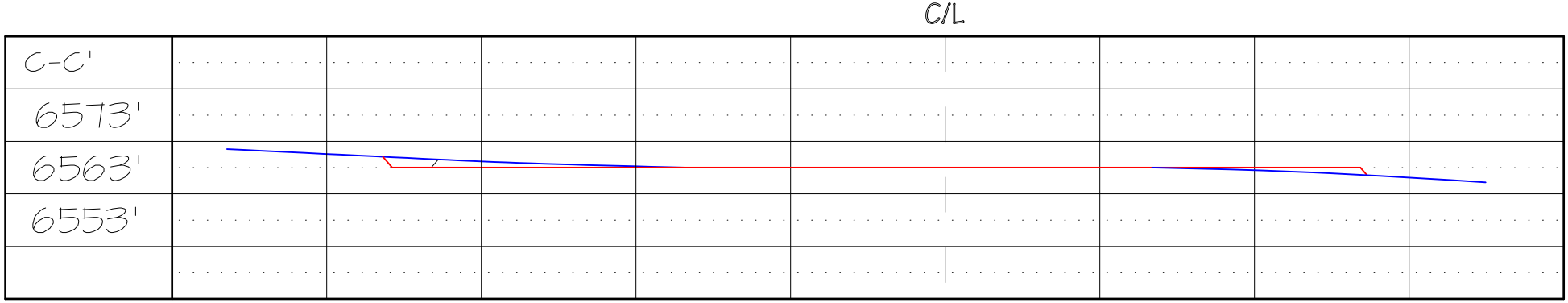
Steel T-Posts have been set to define Edge of Disturbance limits which are 50' offset from edge of staked wellpad.

HILCORP ENERGY COMPANY ALLISON 602 FEDERAL COM #605H
248' FSL & 1786' FWL, SECTION 12, T32N, R7W, NMPM
SAN JUAN COUNTY, NEW MEXICO ELEVATION: 6563'

HORIZONTAL SCALE 1"=110' VERTICAL SCALE 1"=30'







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.

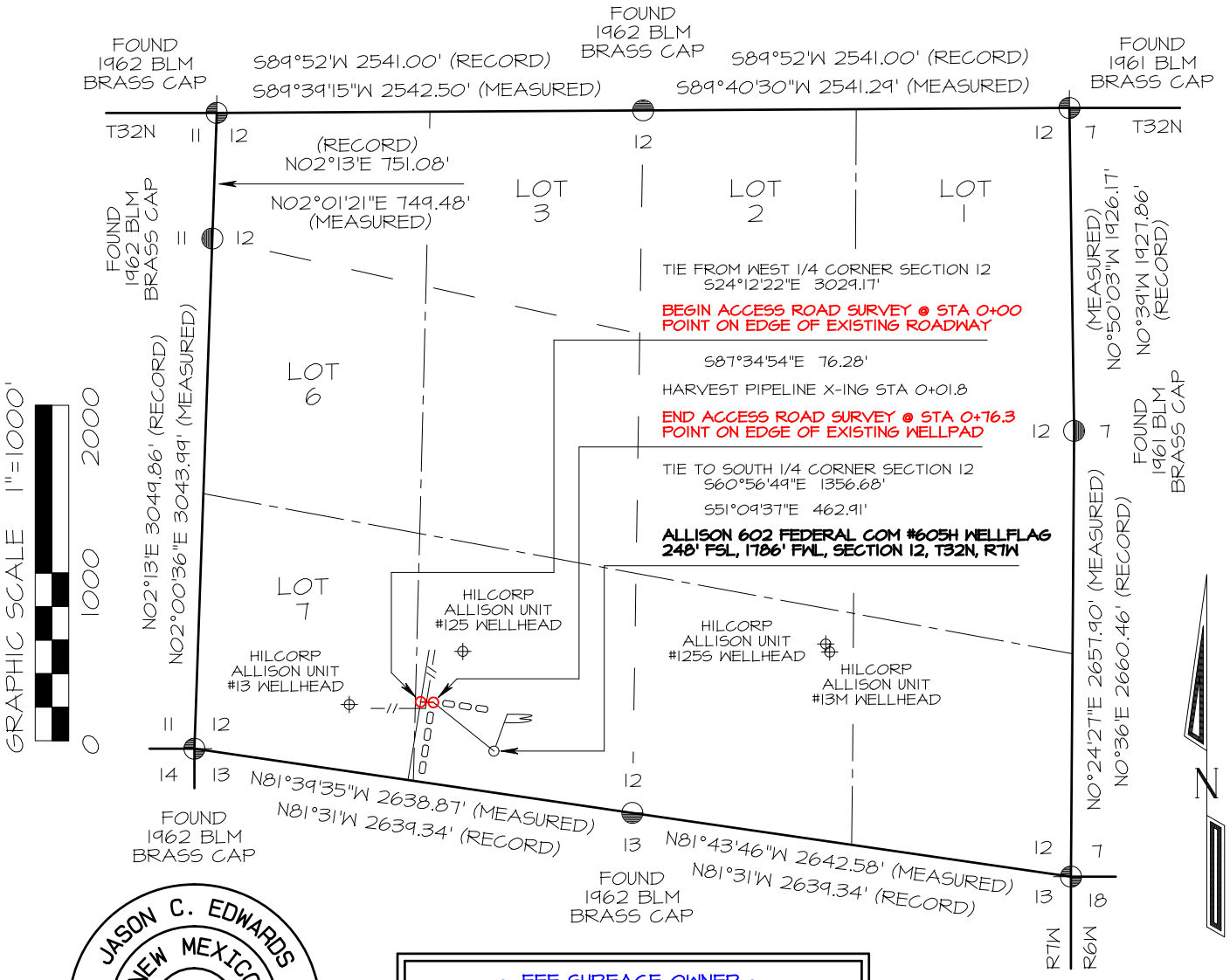
HILCORP ENERGY COMPANY ALLISON 602 FEDERAL COM #605H
PROPOSED ACCESS ROAD SURVEY LOCATED IN
SE/4 SW/4 OF SECTION 12, T32N, R7W, NMPM
SAN JUAN COUNTY, NEW MEXICO

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



~ FEE SURFACE OWNER ~ Bryce Sean Washburn	
0+00 TO 0+76.3	76.3 FT / 4.6 RODS

JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR

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 20, 2025

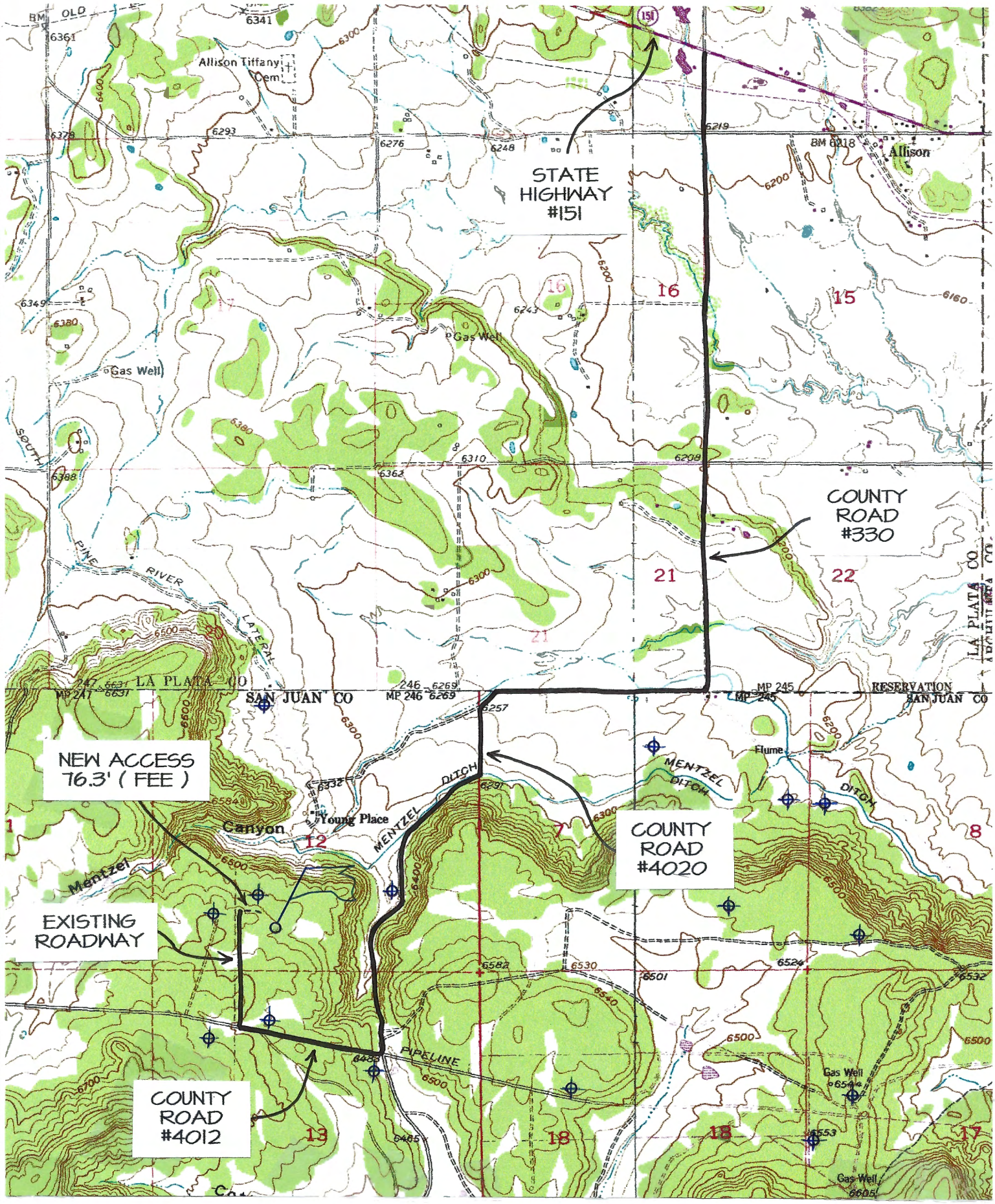
Prepared for:
HILCORP ENERGY COMPANY
P.O. BOX #61529
HOUSTON, TX 77208-1529

Land Surveyor:
Jason C. Edwards
Mailing Address:
Post Office Box 6612
Farmington, NM 87499
Business Address:
111 East Pinon Street
Farmington, NM 87402
(505) 486-1695 (Office)
ncesurveys@comcast.net
NCE SURVEYS, INC.

CHECKED BY: JCE
DRAWN BY: EDO
SHEET 6 OF 8
FILENAME: 32712AP1

HILCORP ENERGY COMPANY ALLISON 602 FEDERAL COM #605H

248' FSL & 1786' 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 602 Federal Com #605H

248' FSL & 1786' FWL, Section 12, T32N, R7W, N.M.P.M., San Juan County, NM

Latitude 36.989578°N Longitude -107.520942°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 602 Federal Com #605H existing location on right-hand side of existing roadway.

San Juan County, NM Allison 602 Federal Com 605H

Hilcorp Energy Company

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 602 Federal Com 605H	**Ground Elevation (ft. MSL):**	6,563’
Surface Hole Location:	36.989574° N, 107.520335° W	**Total Measured Depth (ft.)**	23,266’
Bottom Hole Location:	36.985887° N, 107.463973° 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

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**.
- I**ntermediate casing will be pressure tested to 1,500 psi for 30 minutes.**

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'	6,500'/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'	23,266'/7,129'	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	4.3	3.5
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:

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

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

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

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.

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	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	6,500’	Lead	1,947 ft^3	380	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	587 ft^3	273	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	23,266’	Lead	551 ft^3	351	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	4,648 ft^3	3,141	25%	Class G Yield: 1.48 ft^3/sk	14.0	7,100’
		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' – 350'
Intermediate	LSND / Gel	8.4 – 10.0	<6	N/A	350' – 6,500'
Production	Oil Base Mud	10.0 – 12.0	6 – 8	70/30 – 75/25	6,500' – 23,266'

Drilling Fluids Notes:

- In the 8-1/2" production section, oil base mud will be utilized which will be an invert mud. The base fluid will be diesel. Brine fluid will be $CaCl_2$ or KCl.
- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 2,177 bbls (12,224 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.

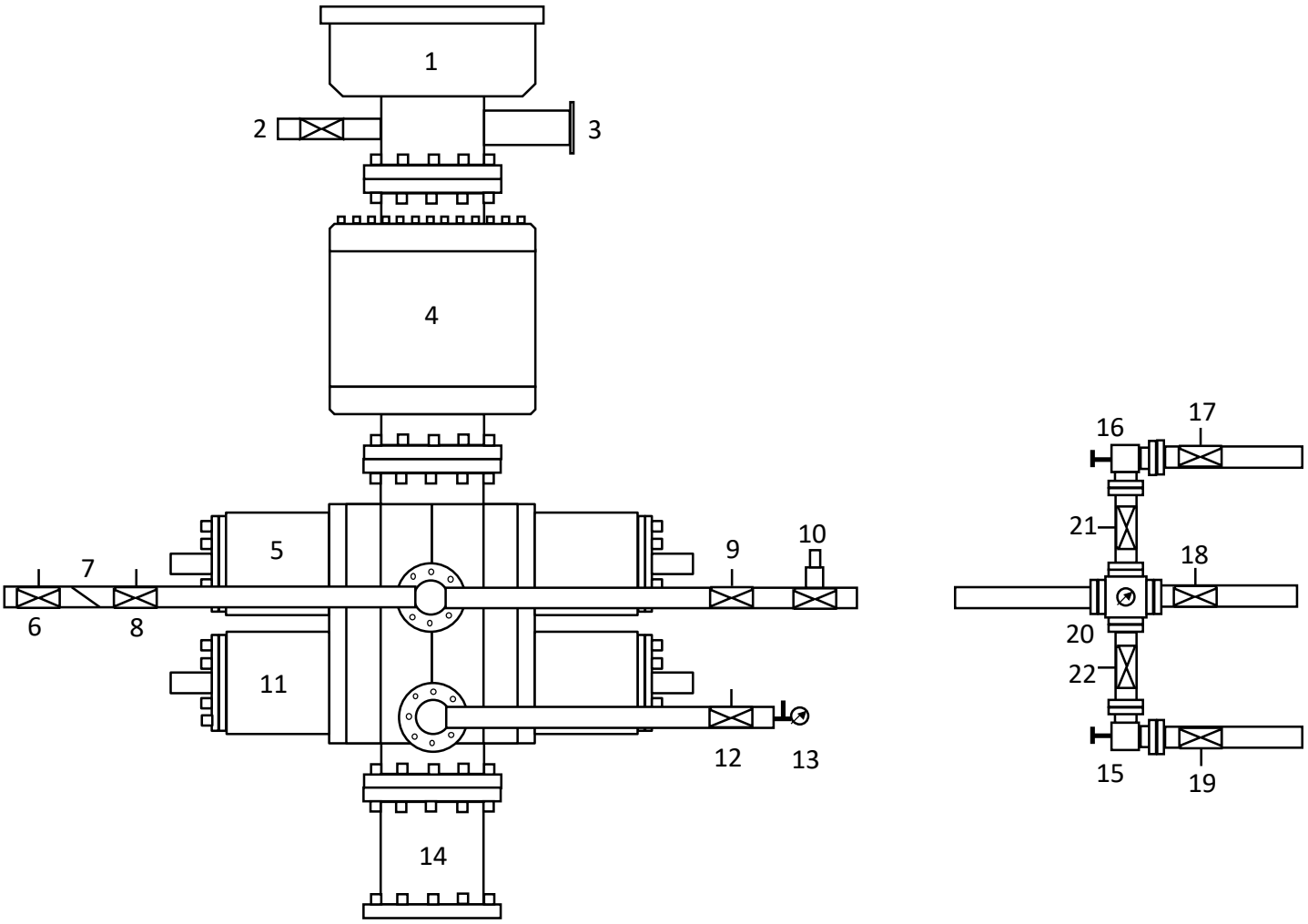
*NOTE: Although this horizontal well may be drilled past the applicable setbacks, an unorthodox location application is not required because the completed interval in this well, as defined by 19.15.16.7 8(1) NMAC, will be entirely within the applicable setbacks. This approach complies with all applicable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

San Juan County, NM Allison 602 Federal Com 605H

Hilcorp Energy Company

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 602 Federal Com 605H
OH
Plan #7

GL 6563' & RKB 17' @ 6580.00ft

Northing	Easting	Latitude	Longitude
2179624.21	591412.89	36.989574	-107.520335

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
06 System Datum: Mean Sea Level

LONESTAR CONSULTING

Plan: Plan #7 (Allison 602 Federal Com 605H/OH)

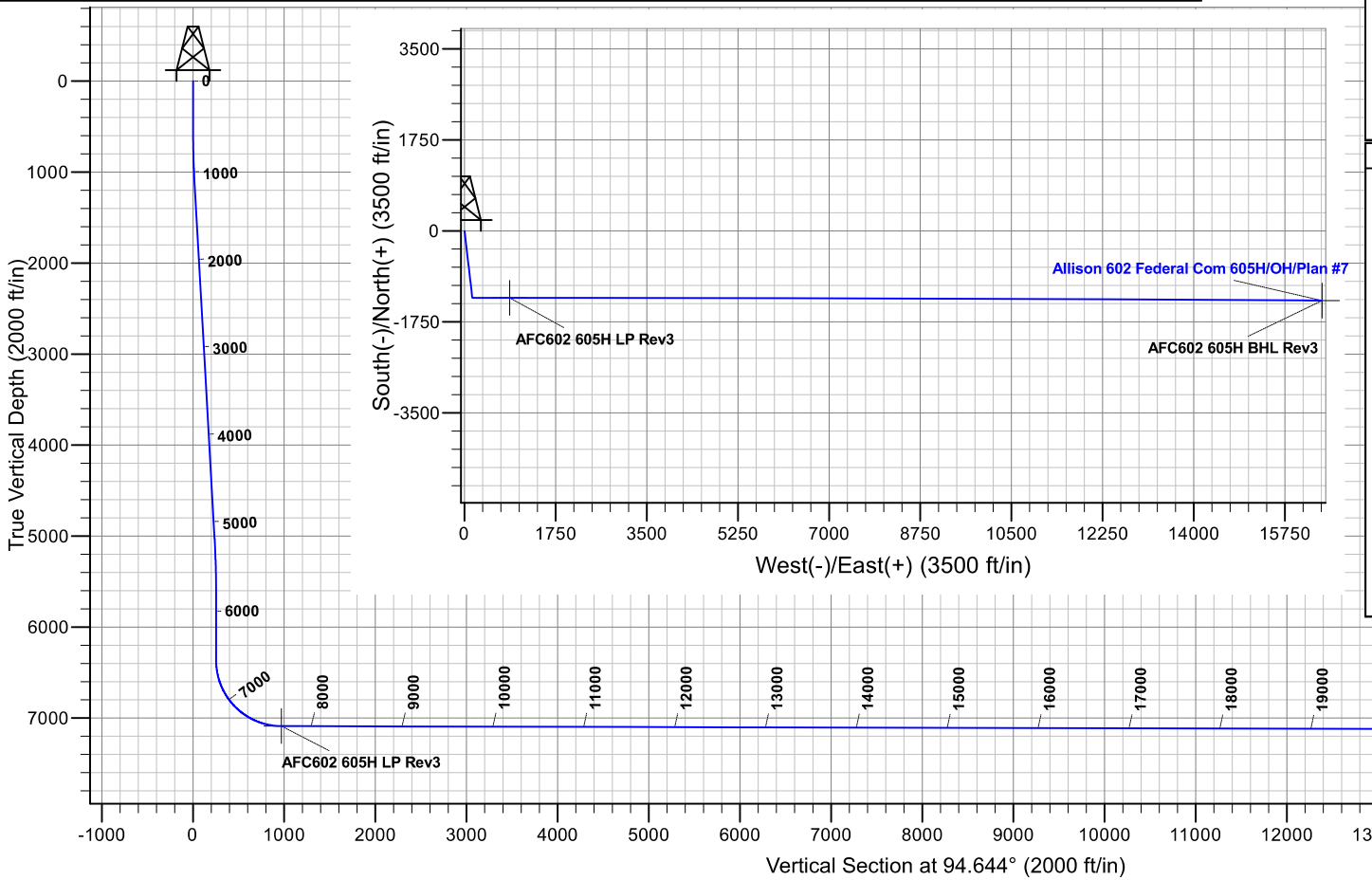
Created By: Janie Collins Date: 14:53, March 06 2025

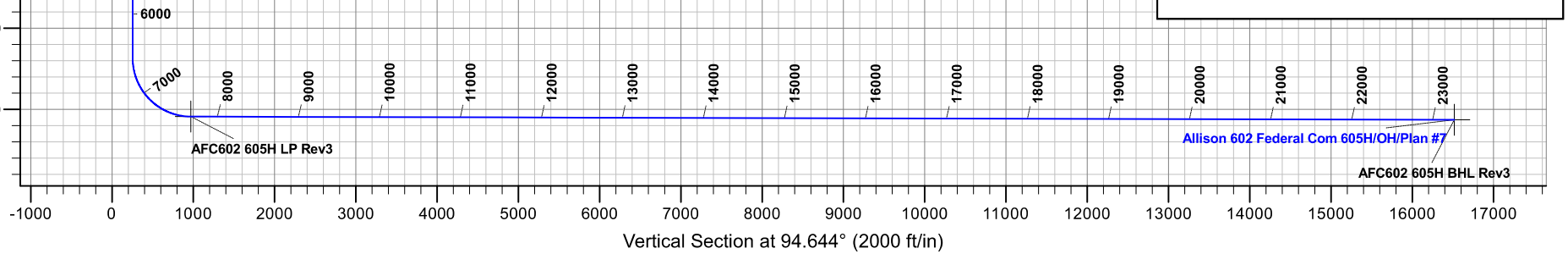
PLAN DETAILS

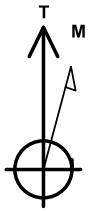
MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect	Annotation
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	Start Build 2.50
1142.08	16.05	173.353	1133.72	-88.76	10.34	2.50	17.50	Start 4040.08 hold at 1142.08 MD
5182.17	16.05	173.353	5016.28	-1198.37	139.66	0.00	236.23	Start Drop -2.50
5824.25	0.00	0.000	5650.00	-1287.13	150.00	2.50	253.73	Start 719.18 hold at 5824.25 MD
6543.43	0.00	0.000	6369.18	-1287.13	150.00	0.00	253.73	Start DLS 7.96 TFO 90.00
7672.30	89.85	90.000	7089.00	-1287.13	868.00	7.96	969.37	Start DLS 0.00 TFO 90.60
23266.38	89.85	90.369	7129.00	-1337.31	16461.92	0.00	16516.15	TD at 23266.38

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
AFC602 605H LP Rev3	7089.00	-1287.13	868.00	2178339.95	592285.11	36.986039	-107.517363
AFC602 605H BHL Rev3	7129.00	-1337.31	16461.92	2178341.02	607879.08	36.985887	-107.463973







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	2355.68	OJO ALAMO
2400.00	2459.74	KIRTLAND
2814.00	2890.54	FRUITLAND
3198.00	3290.12	PICTURED CLIFFS
3708.00	3820.81	LEWIS SHALE
5137.00	5306.87	CLIFFHOUSE
5498.00	5672.14	MENEFEE
5704.00	5878.25	POINT LOOKOUT
6226.00	6400.25	MANCOS
6741.00	6934.16	MANCOS A
6917.00	7166.03	MANCOS B
7084.00	7589.22	MANCOS B TARGET
7109.00	15520.20	MANCOS C

Hilcorp Energy - San Juan Basin

San Juan, NM NAD27
Allison Unit 601 / 701 Pad
Allison 602 Federal Com 605H - Slot 06

OH

Plan: Plan #7

Standard Planning Report

06 March, 2025

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**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 602 Federal Com 605H - Slot 06

Well Position	**+N/-S**	0.00 ft	**Northing:**	2,179,624.21 usft	**Latitude:**	36.989574
	+E/-W	0.00 ft	**Easting:**	591,412.89 usft	**Longitude:**	-107.520335
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,563.00 ft
Grid Convergence:		0.19 °				

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	94.644

Plan Survey Tool Program **Date** 3/6/2025

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	23,265.90	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	
1,142.08	16.05	173.353	1,133.72	-88.76	10.34	2.50	2.50	0.00	173.35	
5,182.17	16.05	173.353	5,016.28	-1,198.37	139.66	0.00	0.00	0.00	0.00	
5,824.25	0.00	0.000	5,650.00	-1,287.13	150.00	2.50	-2.50	0.00	180.00	
6,543.43	0.00	0.000	6,369.18	-1,287.13	150.00	0.00	0.00	0.00	0.00	
7,672.31	89.85	90.000	7,089.00	-1,287.13	868.00	7.96	7.96	7.97	90.00	AFC602 605H LP Rev
23,266.38	89.85	90.369	7,129.00	-1,337.31	16,461.92	0.00	0.00	0.00	90.60	AFC602 605H BHL R

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**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	173.353	599.97	-2.17	0.25	0.43	2.50	2.50	0.00
700.00	5.00	173.353	699.75	-8.66	1.01	1.71	2.50	2.50	0.00
800.00	7.50	173.353	799.14	-19.48	2.27	3.84	2.50	2.50	0.00
900.00	10.00	173.353	897.97	-34.58	4.03	6.82	2.50	2.50	0.00
1,000.00	12.50	173.353	996.04	-53.96	6.29	10.64	2.50	2.50	0.00
1,100.00	15.00	173.353	1,093.17	-77.57	9.04	15.29	2.50	2.50	0.00
1,142.08	16.05	173.353	1,133.72	-88.76	10.34	17.50	2.50	2.50	0.00
1,200.00	16.05	173.353	1,189.38	-104.66	12.20	20.63	0.00	0.00	0.00
1,300.00	16.05	173.353	1,285.48	-132.13	15.40	26.05	0.00	0.00	0.00
1,400.00	16.05	173.353	1,381.58	-159.59	18.60	31.46	0.00	0.00	0.00
1,500.00	16.05	173.353	1,477.68	-187.06	21.80	36.87	0.00	0.00	0.00
1,600.00	16.05	173.353	1,573.78	-214.52	25.00	42.29	0.00	0.00	0.00
1,700.00	16.05	173.353	1,669.88	-241.99	28.20	47.70	0.00	0.00	0.00
1,800.00	16.05	173.353	1,765.98	-269.45	31.40	53.12	0.00	0.00	0.00
1,900.00	16.05	173.353	1,862.08	-296.92	34.60	58.53	0.00	0.00	0.00
2,000.00	16.05	173.353	1,958.18	-324.38	37.80	63.94	0.00	0.00	0.00
2,100.00	16.05	173.353	2,054.28	-351.85	41.00	69.36	0.00	0.00	0.00
2,200.00	16.05	173.353	2,150.39	-379.31	44.20	74.77	0.00	0.00	0.00
2,300.00	16.05	173.353	2,246.49	-406.78	47.41	80.19	0.00	0.00	0.00
2,400.00	16.05	173.353	2,342.59	-434.25	50.61	85.60	0.00	0.00	0.00
2,500.00	16.05	173.353	2,438.69	-461.71	53.81	91.01	0.00	0.00	0.00
2,600.00	16.05	173.353	2,534.79	-489.18	57.01	96.43	0.00	0.00	0.00
2,700.00	16.05	173.353	2,630.89	-516.64	60.21	101.84	0.00	0.00	0.00
2,800.00	16.05	173.353	2,726.99	-544.11	63.41	107.26	0.00	0.00	0.00
2,900.00	16.05	173.353	2,823.09	-571.57	66.61	112.67	0.00	0.00	0.00
3,000.00	16.05	173.353	2,919.19	-599.04	69.81	118.09	0.00	0.00	0.00
3,100.00	16.05	173.353	3,015.30	-626.50	73.01	123.50	0.00	0.00	0.00
3,200.00	16.05	173.353	3,111.40	-653.97	76.21	128.91	0.00	0.00	0.00
3,300.00	16.05	173.353	3,207.50	-681.43	79.41	134.33	0.00	0.00	0.00
3,400.00	16.05	173.353	3,303.60	-708.90	82.61	139.74	0.00	0.00	0.00
3,500.00	16.05	173.353	3,399.70	-736.36	85.81	145.16	0.00	0.00	0.00
3,600.00	16.05	173.353	3,495.80	-763.83	89.02	150.57	0.00	0.00	0.00
3,700.00	16.05	173.353	3,591.90	-791.29	92.22	155.98	0.00	0.00	0.00
3,800.00	16.05	173.353	3,688.00	-818.76	95.42	161.40	0.00	0.00	0.00
3,900.00	16.05	173.353	3,784.10	-846.22	98.62	166.81	0.00	0.00	0.00
4,000.00	16.05	173.353	3,880.21	-873.69	101.82	172.23	0.00	0.00	0.00
4,100.00	16.05	173.353	3,976.31	-901.15	105.02	177.64	0.00	0.00	0.00
4,200.00	16.05	173.353	4,072.41	-928.62	108.22	183.05	0.00	0.00	0.00
4,300.00	16.05	173.353	4,168.51	-956.08	111.42	188.47	0.00	0.00	0.00
4,400.00	16.05	173.353	4,264.61	-983.55	114.62	193.88	0.00	0.00	0.00
4,500.00	16.05	173.353	4,360.71	-1,011.01	117.82	199.30	0.00	0.00	0.00
4,600.00	16.05	173.353	4,456.81	-1,038.48	121.02	204.71	0.00	0.00	0.00
4,700.00	16.05	173.353	4,552.91	-1,065.95	124.22	210.13	0.00	0.00	0.00
4,800.00	16.05	173.353	4,649.01	-1,093.41	127.42	215.54	0.00	0.00	0.00
4,900.00	16.05	173.353	4,745.12	-1,120.88	130.62	220.95	0.00	0.00	0.00
5,000.00	16.05	173.353	4,841.22	-1,148.34	133.83	226.37	0.00	0.00	0.00
5,100.00	16.05	173.353	4,937.32	-1,175.81	137.03	231.78	0.00	0.00	0.00
5,182.17	16.05	173.353	5,016.28	-1,198.37	139.66	236.23	0.00	0.00	0.00

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**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	15.61	173.353	5,033.44	-1,203.20	140.22	237.18	2.50	-2.50	0.00
5,300.00	13.11	173.353	5,130.31	-1,227.83	143.09	242.04	2.50	-2.50	0.00
5,400.00	10.61	173.353	5,228.17	-1,248.24	145.47	246.06	2.50	-2.50	0.00
5,500.00	8.11	173.353	5,326.83	-1,264.38	147.35	249.24	2.50	-2.50	0.00
5,600.00	5.61	173.353	5,426.10	-1,276.24	148.73	251.58	2.50	-2.50	0.00
5,700.00	3.11	173.353	5,525.81	-1,283.79	149.61	253.07	2.50	-2.50	0.00
5,800.00	0.61	173.353	5,625.75	-1,287.00	149.99	253.70	2.50	-2.50	0.00
5,824.25	0.00	0.000	5,650.00	-1,287.13	150.00	253.73	2.50	-2.50	0.00
5,900.00	0.00	0.000	5,725.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,000.00	0.00	0.000	5,825.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,100.00	0.00	0.000	5,925.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,200.00	0.00	0.000	6,025.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,300.00	0.00	0.000	6,125.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,400.00	0.00	0.000	6,225.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,500.00	0.00	0.000	6,325.75	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,543.43	0.00	0.000	6,369.18	-1,287.13	150.00	253.73	0.00	0.00	0.00
6,600.00	4.50	90.000	6,425.69	-1,287.13	152.22	255.94	7.96	7.96	0.00
6,700.00	12.46	90.000	6,524.52	-1,287.13	166.96	270.63	7.96	7.96	0.00
6,800.00	20.42	90.000	6,620.35	-1,287.13	195.24	298.82	7.96	7.96	0.00
6,900.00	28.38	90.000	6,711.34	-1,287.13	236.52	339.96	7.96	7.96	0.00
7,000.00	36.34	90.000	6,795.74	-1,287.13	290.01	393.27	7.96	7.96	0.00
7,100.00	44.30	90.000	6,871.93	-1,287.13	354.66	457.71	7.96	7.96	0.00
7,200.00	52.26	90.000	6,938.42	-1,287.13	429.24	532.05	7.96	7.96	0.00
7,300.00	60.22	90.000	6,993.95	-1,287.13	512.31	614.85	7.96	7.96	0.00
7,400.00	68.18	90.000	7,037.43	-1,287.13	602.27	704.51	7.96	7.96	0.00
7,500.00	76.14	90.000	7,068.04	-1,287.13	697.39	799.32	7.96	7.96	0.00
7,600.00	84.10	90.000	7,085.19	-1,287.13	795.83	897.43	7.96	7.96	0.00
7,672.31	89.85	90.000	7,089.00	-1,287.13	868.00	969.37	7.96	7.96	0.00
7,700.00	89.85	90.000	7,089.07	-1,287.13	895.69	996.97	0.00	0.00	0.00
7,800.00	89.85	90.003	7,089.32	-1,287.13	995.69	1,096.64	0.00	0.00	0.00
7,900.00	89.85	90.005	7,089.58	-1,287.14	1,095.69	1,196.32	0.00	0.00	0.00
8,000.00	89.85	90.008	7,089.83	-1,287.15	1,195.69	1,295.99	0.00	0.00	0.00
8,100.00	89.85	90.010	7,090.08	-1,287.16	1,295.69	1,395.66	0.00	0.00	0.00
8,200.00	89.85	90.012	7,090.34	-1,287.18	1,395.69	1,495.33	0.00	0.00	0.00
8,300.00	89.85	90.015	7,090.59	-1,287.21	1,495.69	1,595.01	0.00	0.00	0.00
8,400.00	89.85	90.017	7,090.84	-1,287.23	1,595.69	1,694.68	0.00	0.00	0.00
8,500.00	89.85	90.019	7,091.10	-1,287.27	1,695.69	1,794.35	0.00	0.00	0.00
8,600.00	89.85	90.022	7,091.35	-1,287.30	1,795.69	1,894.03	0.00	0.00	0.00
8,700.00	89.85	90.024	7,091.60	-1,287.34	1,895.69	1,993.70	0.00	0.00	0.00
8,800.00	89.85	90.027	7,091.86	-1,287.39	1,995.69	2,093.38	0.00	0.00	0.00
8,900.00	89.85	90.029	7,092.11	-1,287.44	2,095.69	2,193.05	0.00	0.00	0.00
9,000.00	89.85	90.031	7,092.37	-1,287.49	2,195.69	2,292.73	0.00	0.00	0.00
9,100.00	89.85	90.034	7,092.62	-1,287.54	2,295.69	2,392.40	0.00	0.00	0.00
9,200.00	89.85	90.036	7,092.87	-1,287.60	2,395.69	2,492.08	0.00	0.00	0.00
9,300.00	89.85	90.038	7,093.13	-1,287.67	2,495.69	2,591.76	0.00	0.00	0.00
9,400.00	89.85	90.041	7,093.38	-1,287.74	2,595.69	2,691.43	0.00	0.00	0.00
9,500.00	89.85	90.043	7,093.63	-1,287.81	2,695.69	2,791.11	0.00	0.00	0.00
9,600.00	89.85	90.045	7,093.89	-1,287.89	2,795.69	2,890.79	0.00	0.00	0.00
9,700.00	89.85	90.048	7,094.14	-1,287.97	2,895.69	2,990.47	0.00	0.00	0.00
9,800.00	89.85	90.050	7,094.40	-1,288.06	2,995.69	3,090.15	0.00	0.00	0.00
9,900.00	89.85	90.053	7,094.65	-1,288.15	3,095.69	3,189.82	0.00	0.00	0.00
10,000.00	89.85	90.055	7,094.90	-1,288.24	3,195.69	3,289.50	0.00	0.00	0.00
10,100.00	89.85	90.057	7,095.16	-1,288.34	3,295.69	3,389.18	0.00	0.00	0.00
10,200.00	89.85	90.060	7,095.41	-1,288.44	3,395.69	3,488.86	0.00	0.00	0.00

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**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	90.062	7,095.67	-1,288.55	3,495.69	3,588.54	0.00	0.00	0.00
10,400.00	89.85	90.064	7,095.92	-1,288.66	3,595.69	3,688.22	0.00	0.00	0.00
10,500.00	89.85	90.067	7,096.18	-1,288.77	3,695.69	3,787.90	0.00	0.00	0.00
10,600.00	89.85	90.069	7,096.43	-1,288.89	3,795.68	3,887.58	0.00	0.00	0.00
10,700.00	89.85	90.071	7,096.68	-1,289.01	3,895.68	3,987.26	0.00	0.00	0.00
10,800.00	89.85	90.074	7,096.94	-1,289.14	3,995.68	4,086.95	0.00	0.00	0.00
10,900.00	89.85	90.076	7,097.19	-1,289.27	4,095.68	4,186.63	0.00	0.00	0.00
11,000.00	89.85	90.079	7,097.45	-1,289.40	4,195.68	4,286.31	0.00	0.00	0.00
11,100.00	89.85	90.081	7,097.70	-1,289.54	4,295.68	4,385.99	0.00	0.00	0.00
11,200.00	89.85	90.083	7,097.96	-1,289.69	4,395.68	4,485.68	0.00	0.00	0.00
11,300.00	89.85	90.086	7,098.21	-1,289.83	4,495.68	4,585.36	0.00	0.00	0.00
11,400.00	89.85	90.088	7,098.47	-1,289.99	4,595.68	4,685.04	0.00	0.00	0.00
11,500.00	89.85	90.090	7,098.72	-1,290.14	4,695.68	4,784.73	0.00	0.00	0.00
11,600.00	89.85	90.093	7,098.98	-1,290.30	4,795.68	4,884.41	0.00	0.00	0.00
11,700.00	89.85	90.095	7,099.23	-1,290.47	4,895.68	4,984.09	0.00	0.00	0.00
11,800.00	89.85	90.098	7,099.49	-1,290.63	4,995.68	5,083.78	0.00	0.00	0.00
11,900.00	89.85	90.100	7,099.74	-1,290.81	5,095.68	5,183.46	0.00	0.00	0.00
12,000.00	89.85	90.102	7,100.00	-1,290.98	5,195.68	5,283.15	0.00	0.00	0.00
12,100.00	89.85	90.105	7,100.25	-1,291.16	5,295.68	5,382.84	0.00	0.00	0.00
12,200.00	89.85	90.107	7,100.51	-1,291.35	5,395.68	5,482.52	0.00	0.00	0.00
12,300.00	89.85	90.109	7,100.76	-1,291.54	5,495.68	5,582.21	0.00	0.00	0.00
12,400.00	89.85	90.112	7,101.02	-1,291.73	5,595.68	5,681.89	0.00	0.00	0.00
12,500.00	89.85	90.114	7,101.27	-1,291.93	5,695.68	5,781.58	0.00	0.00	0.00
12,600.00	89.85	90.116	7,101.53	-1,292.13	5,795.68	5,881.27	0.00	0.00	0.00
12,700.00	89.85	90.119	7,101.78	-1,292.33	5,895.68	5,980.96	0.00	0.00	0.00
12,800.00	89.85	90.121	7,102.04	-1,292.54	5,995.67	6,080.65	0.00	0.00	0.00
12,900.00	89.85	90.124	7,102.29	-1,292.76	6,095.67	6,180.33	0.00	0.00	0.00
13,000.00	89.85	90.126	7,102.55	-1,292.97	6,195.67	6,280.02	0.00	0.00	0.00
13,100.00	89.85	90.128	7,102.80	-1,293.20	6,295.67	6,379.71	0.00	0.00	0.00
13,200.00	89.85	90.131	7,103.06	-1,293.42	6,395.67	6,479.40	0.00	0.00	0.00
13,300.00	89.85	90.133	7,103.32	-1,293.65	6,495.67	6,579.09	0.00	0.00	0.00
13,400.00	89.85	90.135	7,103.57	-1,293.89	6,595.67	6,678.78	0.00	0.00	0.00
13,500.00	89.85	90.138	7,103.83	-1,294.12	6,695.67	6,778.47	0.00	0.00	0.00
13,600.00	89.85	90.140	7,104.08	-1,294.37	6,795.67	6,878.16	0.00	0.00	0.00
13,700.00	89.85	90.142	7,104.34	-1,294.61	6,895.67	6,977.85	0.00	0.00	0.00
13,800.00	89.85	90.145	7,104.59	-1,294.86	6,995.67	7,077.54	0.00	0.00	0.00
13,900.00	89.85	90.147	7,104.85	-1,295.12	7,095.67	7,177.24	0.00	0.00	0.00
14,000.00	89.85	90.150	7,105.11	-1,295.38	7,195.67	7,276.93	0.00	0.00	0.00
14,100.00	89.85	90.152	7,105.36	-1,295.64	7,295.67	7,376.62	0.00	0.00	0.00
14,200.00	89.85	90.154	7,105.62	-1,295.91	7,395.67	7,476.31	0.00	0.00	0.00
14,300.00	89.85	90.157	7,105.87	-1,296.18	7,495.67	7,576.01	0.00	0.00	0.00
14,400.00	89.85	90.159	7,106.13	-1,296.46	7,595.66	7,675.70	0.00	0.00	0.00
14,500.00	89.85	90.161	7,106.39	-1,296.74	7,695.66	7,775.39	0.00	0.00	0.00
14,600.00	89.85	90.164	7,106.64	-1,297.02	7,795.66	7,875.09	0.00	0.00	0.00
14,700.00	89.85	90.166	7,106.90	-1,297.31	7,895.66	7,974.78	0.00	0.00	0.00
14,800.00	89.85	90.169	7,107.15	-1,297.60	7,995.66	8,074.47	0.00	0.00	0.00
14,900.00	89.85	90.171	7,107.41	-1,297.90	8,095.66	8,174.17	0.00	0.00	0.00
15,000.00	89.85	90.173	7,107.67	-1,298.20	8,195.66	8,273.87	0.00	0.00	0.00
15,100.00	89.85	90.176	7,107.92	-1,298.50	8,295.66	8,373.56	0.00	0.00	0.00
15,200.00	89.85	90.178	7,108.18	-1,298.81	8,395.66	8,473.26	0.00	0.00	0.00
15,300.00	89.85	90.180	7,108.44	-1,299.12	8,495.66	8,572.95	0.00	0.00	0.00
15,400.00	89.85	90.183	7,108.69	-1,299.44	8,595.66	8,672.65	0.00	0.00	0.00
15,500.00	89.85	90.185	7,108.95	-1,299.76	8,695.66	8,772.35	0.00	0.00	0.00
15,600.00	89.85	90.187	7,109.20	-1,300.08	8,795.66	8,872.04	0.00	0.00	0.00

Lonestar Consulting, LLC

Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**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	90.190	7,109.46	-1,300.41	8,895.65	8,971.74	0.00	0.00	0.00
15,800.00	89.85	90.192	7,109.72	-1,300.75	8,995.65	9,071.44	0.00	0.00	0.00
15,900.00	89.85	90.195	7,109.97	-1,301.09	9,095.65	9,171.14	0.00	0.00	0.00
16,000.00	89.85	90.197	7,110.23	-1,301.43	9,195.65	9,270.83	0.00	0.00	0.00
16,100.00	89.85	90.199	7,110.49	-1,301.77	9,295.65	9,370.53	0.00	0.00	0.00
16,200.00	89.85	90.202	7,110.75	-1,302.12	9,395.65	9,470.23	0.00	0.00	0.00
16,300.00	89.85	90.204	7,111.00	-1,302.48	9,495.65	9,569.93	0.00	0.00	0.00
16,400.00	89.85	90.206	7,111.26	-1,302.83	9,595.65	9,669.63	0.00	0.00	0.00
16,500.00	89.85	90.209	7,111.52	-1,303.20	9,695.65	9,769.33	0.00	0.00	0.00
16,600.00	89.85	90.211	7,111.77	-1,303.56	9,795.65	9,869.03	0.00	0.00	0.00
16,700.00	89.85	90.214	7,112.03	-1,303.93	9,895.65	9,968.73	0.00	0.00	0.00
16,800.00	89.85	90.216	7,112.29	-1,304.31	9,995.64	10,068.43	0.00	0.00	0.00
16,900.00	89.85	90.218	7,112.54	-1,304.69	10,095.64	10,168.13	0.00	0.00	0.00
17,000.00	89.85	90.221	7,112.80	-1,305.07	10,195.64	10,267.84	0.00	0.00	0.00
17,100.00	89.85	90.223	7,113.06	-1,305.46	10,295.64	10,367.54	0.00	0.00	0.00
17,200.00	89.85	90.225	7,113.32	-1,305.85	10,395.64	10,467.24	0.00	0.00	0.00
17,300.00	89.85	90.228	7,113.57	-1,306.24	10,495.64	10,566.94	0.00	0.00	0.00
17,400.00	89.85	90.230	7,113.83	-1,306.64	10,595.64	10,666.65	0.00	0.00	0.00
17,500.00	89.85	90.232	7,114.09	-1,307.05	10,695.64	10,766.35	0.00	0.00	0.00
17,600.00	89.85	90.235	7,114.34	-1,307.46	10,795.64	10,866.05	0.00	0.00	0.00
17,700.00	89.85	90.237	7,114.60	-1,307.87	10,895.63	10,965.76	0.00	0.00	0.00
17,800.00	89.85	90.240	7,114.86	-1,308.28	10,995.63	11,065.46	0.00	0.00	0.00
17,900.00	89.85	90.242	7,115.12	-1,308.70	11,095.63	11,165.17	0.00	0.00	0.00
18,000.00	89.85	90.244	7,115.37	-1,309.13	11,195.63	11,264.87	0.00	0.00	0.00
18,100.00	89.85	90.247	7,115.63	-1,309.56	11,295.63	11,364.58	0.00	0.00	0.00
18,200.00	89.85	90.249	7,115.89	-1,309.99	11,395.63	11,464.28	0.00	0.00	0.00
18,300.00	89.85	90.251	7,116.15	-1,310.43	11,495.63	11,563.99	0.00	0.00	0.00
18,400.00	89.85	90.254	7,116.41	-1,310.87	11,595.63	11,663.69	0.00	0.00	0.00
18,500.00	89.85	90.256	7,116.66	-1,311.31	11,695.62	11,763.40	0.00	0.00	0.00
18,600.00	89.85	90.258	7,116.92	-1,311.76	11,795.62	11,863.11	0.00	0.00	0.00
18,700.00	89.85	90.261	7,117.18	-1,312.21	11,895.62	11,962.81	0.00	0.00	0.00
18,800.00	89.85	90.263	7,117.44	-1,312.67	11,995.62	12,062.52	0.00	0.00	0.00
18,900.00	89.85	90.266	7,117.69	-1,313.13	12,095.62	12,162.23	0.00	0.00	0.00
19,000.00	89.85	90.268	7,117.95	-1,313.60	12,195.62	12,261.94	0.00	0.00	0.00
19,100.00	89.85	90.270	7,118.21	-1,314.07	12,295.62	12,361.64	0.00	0.00	0.00
19,200.00	89.85	90.273	7,118.47	-1,314.54	12,395.61	12,461.35	0.00	0.00	0.00
19,300.00	89.85	90.275	7,118.73	-1,315.02	12,495.61	12,561.06	0.00	0.00	0.00
19,400.00	89.85	90.277	7,118.99	-1,315.50	12,595.61	12,660.77	0.00	0.00	0.00
19,500.00	89.85	90.280	7,119.24	-1,315.99	12,695.61	12,760.48	0.00	0.00	0.00
19,600.00	89.85	90.282	7,119.50	-1,316.48	12,795.61	12,860.19	0.00	0.00	0.00
19,700.00	89.85	90.285	7,119.76	-1,316.97	12,895.61	12,959.90	0.00	0.00	0.00
19,800.00	89.85	90.287	7,120.02	-1,317.47	12,995.61	13,059.61	0.00	0.00	0.00
19,900.00	89.85	90.289	7,120.28	-1,317.97	13,095.60	13,159.32	0.00	0.00	0.00
20,000.00	89.85	90.292	7,120.54	-1,318.48	13,195.60	13,259.03	0.00	0.00	0.00
20,100.00	89.85	90.294	7,120.79	-1,318.99	13,295.60	13,358.74	0.00	0.00	0.00
20,200.00	89.85	90.296	7,121.05	-1,319.51	13,395.60	13,458.46	0.00	0.00	0.00
20,300.00	89.85	90.299	7,121.31	-1,320.03	13,495.60	13,558.17	0.00	0.00	0.00
20,400.00	89.85	90.301	7,121.57	-1,320.55	13,595.60	13,657.88	0.00	0.00	0.00
20,500.00	89.85	90.303	7,121.83	-1,321.08	13,695.59	13,757.59	0.00	0.00	0.00
20,600.00	89.85	90.306	7,122.09	-1,321.61	13,795.59	13,857.31	0.00	0.00	0.00
20,700.00	89.85	90.308	7,122.35	-1,322.14	13,895.59	13,957.02	0.00	0.00	0.00
20,800.00	89.85	90.311	7,122.60	-1,322.68	13,995.59	14,056.73	0.00	0.00	0.00
20,900.00	89.85	90.313	7,122.86	-1,323.23	14,095.59	14,156.45	0.00	0.00	0.00
21,000.00	89.85	90.315	7,123.12	-1,323.78	14,195.58	14,256.16	0.00	0.00	0.00

Hilcorp Energy Company

Lonestar Consulting, LLC

Planning Report

LONESTAR CONSULTING

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**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	90.318	7,123.38	-1,324.33	14,295.58	14,355.87	0.00	0.00	0.00
21,200.00	89.85	90.320	7,123.64	-1,324.89	14,395.58	14,455.59	0.00	0.00	0.00
21,300.00	89.85	90.322	7,123.90	-1,325.45	14,495.58	14,555.30	0.00	0.00	0.00
21,400.00	89.85	90.325	7,124.16	-1,326.01	14,595.58	14,655.02	0.00	0.00	0.00
21,500.00	89.85	90.327	7,124.42	-1,326.58	14,695.57	14,754.74	0.00	0.00	0.00
21,600.00	89.85	90.329	7,124.68	-1,327.15	14,795.57	14,854.45	0.00	0.00	0.00
21,700.00	89.85	90.332	7,124.94	-1,327.73	14,895.57	14,954.17	0.00	0.00	0.00
21,800.00	89.85	90.334	7,125.19	-1,328.31	14,995.57	15,053.88	0.00	0.00	0.00
21,900.00	89.85	90.337	7,125.45	-1,328.90	15,095.57	15,153.60	0.00	0.00	0.00
22,000.00	89.85	90.339	7,125.71	-1,329.49	15,195.56	15,253.32	0.00	0.00	0.00
22,100.00	89.85	90.341	7,125.97	-1,330.08	15,295.56	15,353.04	0.00	0.00	0.00
22,200.00	89.85	90.344	7,126.23	-1,330.68	15,395.56	15,452.75	0.00	0.00	0.00
22,300.00	89.85	90.346	7,126.49	-1,331.28	15,495.56	15,552.47	0.00	0.00	0.00
22,400.00	89.85	90.348	7,126.75	-1,331.89	15,595.56	15,652.19	0.00	0.00	0.00
22,500.00	89.85	90.351	7,127.01	-1,332.50	15,695.55	15,751.91	0.00	0.00	0.00
22,600.00	89.85	90.353	7,127.27	-1,333.11	15,795.55	15,851.63	0.00	0.00	0.00
22,700.00	89.85	90.356	7,127.53	-1,333.73	15,895.55	15,951.35	0.00	0.00	0.00
22,800.00	89.85	90.358	7,127.79	-1,334.35	15,995.55	16,051.07	0.00	0.00	0.00
22,900.00	89.85	90.360	7,128.05	-1,334.98	16,095.55	16,150.79	0.00	0.00	0.00
23,000.00	89.85	90.363	7,128.31	-1,335.61	16,195.54	16,250.51	0.00	0.00	0.00
23,100.00	89.85	90.365	7,128.57	-1,336.24	16,295.54	16,350.23	0.00	0.00	0.00
23,200.00	89.85	90.367	7,128.83	-1,336.88	16,395.54	16,449.95	0.00	0.00	0.00
23,266.38	89.85	90.369	7,129.00	-1,337.31	16,461.92	16,516.15	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
AFC602 605H LP Rev3 - plan hits target center - Point	0.00	0.000	7,089.00	-1,287.13	868.00	2,178,339.94	592,285.11	36.986039	-107.517363
AFC602 605H BHL Rev - plan hits target center - Point	0.00	0.000	7,129.00	-1,337.31	16,461.92	2,178,341.02	607,879.08	36.985887	-107.463973

Lonestar Consulting, LLC
Planning Report

Database:	edm	**Local Co-ordinate Reference:**	Well Allison 602 Federal Com 605H - Slot 06
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 602 Federal Com 605H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan #7		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,355.68	2,300.00	OJO ALAMO		0.00	0.000
2,459.74	2,400.00	KIRTLAND		0.00	0.000
2,890.54	2,814.00	FRUITLAND		0.00	0.000
3,290.12	3,198.00	PICTURED CLIFFS		0.00	0.000
3,820.81	3,708.00	LEWIS SHALE		0.00	0.000
5,306.87	5,137.00	CLIFFHOUSE		0.00	0.000
5,672.14	5,498.00	MENEFEE		0.00	0.000
5,878.25	5,704.00	POINT LOOKOUT		0.00	0.000
6,400.25	6,226.00	MANCOS		0.00	0.000
6,934.16	6,741.00	MANCOS A		0.00	0.000
7,166.03	6,917.00	MANCOS B		0.00	0.000
7,589.22	7,084.00	MANCOS B TARGET		0.00	0.000
15,520.20	7,109.00	MANCOS C		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

Action 452129

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 452129
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
mray	Cement is required to circulate on both surface and intermediate1 strings of casing.	4/15/2025
mray	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	4/15/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	4/21/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	4/21/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	4/21/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	4/21/2025