Form 3160-3 (June 2015)		FORM APP OMB No. 10 Expires: Januar	04-0137
UNITED STATE		*	y 51, 2018
DEPARTMENT OF THE I BUREAU OF LAND MAN		5. Lease Serial No.	
APPLICATION FOR PERMIT TO D		6. If Indian, Allotee or T	ribe Name
1a. Type of work: DRILL DRI	REENTER	7. If Unit or CA Agreem	ent, Name and No.
	Other		
	Single Zone Multiple Zone	8. Lease Name and Well	No.
2. Name of Operator		9. API Well No. 30-045	-38444
3a. Address	3b. Phone No. (include area code)	10. Field and Pool, or E	xploratory
4. Location of Well (Report location clearly and in accordance	with any State requirements.*)	11. Sec., T. R. M. or Blk	and Survey or Area
At surface			
At proposed prod. zone			
14. Distance in miles and direction from nearest town or post of	fice*	12. County or Parish	13. State
15. Distance from proposed*	16. No of acres in lease 17. Spac	ing Unit dedicated to this w	vell
location to nearest property or lease line, ft.			
(Also to nearest drig. unit line, if any)			
 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 	19. Proposed Depth 20. BLM	1/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 (as applicable)	of Onshore Oil and Gas Order No. 1, and the	Hydraulic Fracturing rule p	per 43 CFR 3162.3-3
1. Well plat certified by a registered surveyor.	4. Bond to cover the operatio	ns unless covered by an exi	sting bond on file (see
 A Drilling Plan. A Surface Use Plan (if the location is on National Forest System) 	Item 20 above). em Lands, the 5. Operator certification.		
SUPO must be filed with the appropriate Forest Service Offic		ormation and/or plans as may	be requested by the
25. Signature	Name (Printed/Typed)	Dat	ie
Title			
Approved by (Signature)	Name (Printed/Typed)	Dat	ie
Title	Office		
Application approval does not warrant or certify that the applica applicant to conduct operations thereon.	nt holds legal or equitable title to those rights	s in the subject lease which	would entitle the
Conditions of approval, if any, are attached.			
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, 1 of the United States any false, fictitious or fraudulent statements			lepartment or agency
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(Continued on page 2)

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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.

Additional Operator Remarks

Location of Well

0. SHL: SESW / 329 FSL / 1753 FWL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.989814 / LONG: -107.521044 (TVD: 0 feet, MD: 0 feet) PPP: NENE / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 15 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: LOT 2 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 14 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: SESE / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 10 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: LOT 1 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 13 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: SWSE / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 11 / LAT: 36.991665 / LONG: -107.54494 (TVD: 7108 feet, MD: 19471 feet) PPP: SESW / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 11 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) BHL: LOT 11 / 675 FSL / 236 FWL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 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 forecasted weather current and 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.

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- 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.
- 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.



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

<u>Project Dimensions</u>: 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.

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

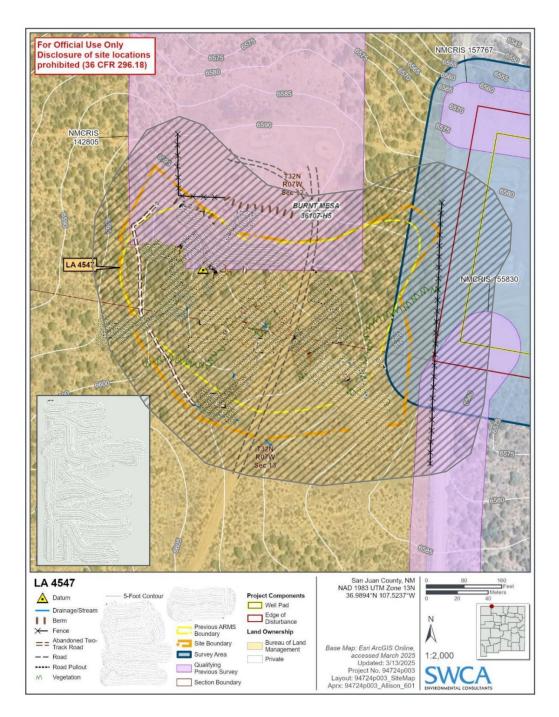
BLM Report Number: 2025(I)008.1F

Project Name: Allison 601H Well Pad Project.

Project Sponsor: Hilcorp Energy.

MONITOR ZONE =





CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(I)008.1F

Project Name: Allison 601H Well Pad Project.

Project Sponsor: Hilcorp Energy.

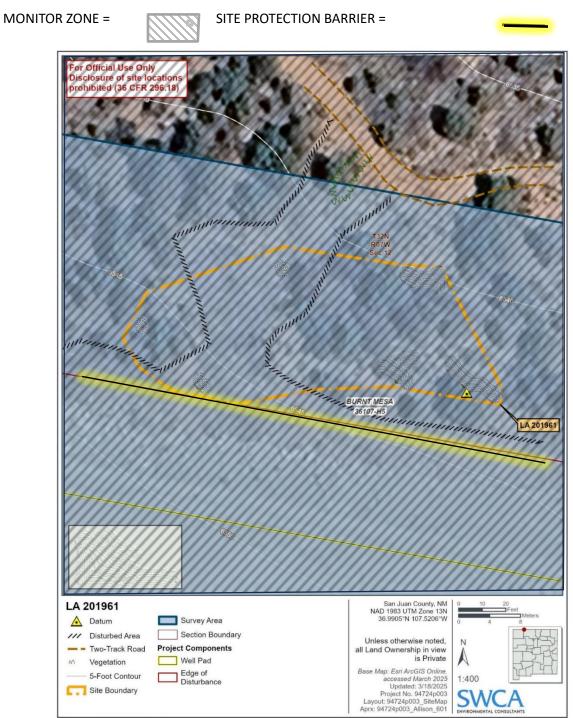


Figure 5.4. LA 201961 site map.



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.

<u>Sites Located:</u> 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 DOI-BLM-NM-F010-2025-0015-EA

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.

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 <u>kadams@blm.gov.</u>

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. . boundary. Fencing must be placed outside of the site

MONITOR ZONE =



TEMPORARY FENCING =



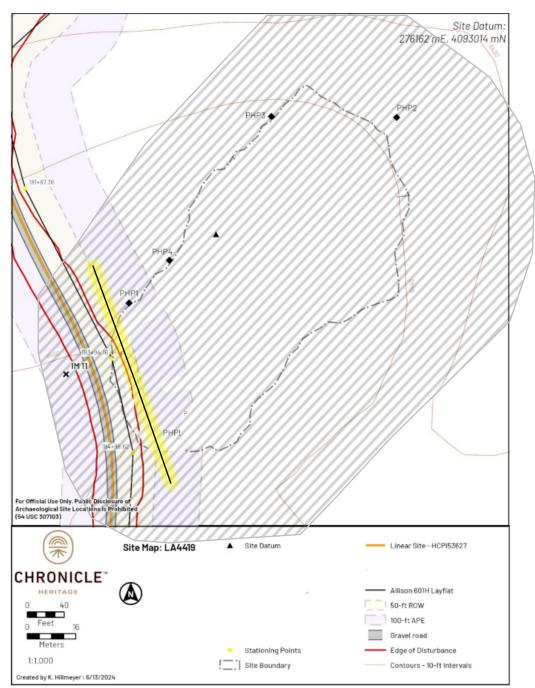


Figure 6-1. LA4419 site map.

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

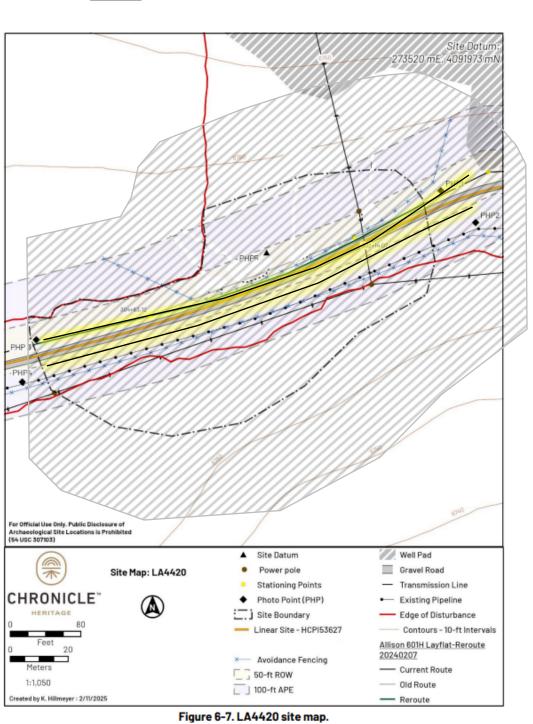
BLM Report Number: 2025(II)014F

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

Project Sponsor: Logos Resources II, LLC.

MONITOR ZONE =

TEMPORARY FENCING =



For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18) DOI-BLM-NM-F010-2025-0015-EA

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 =

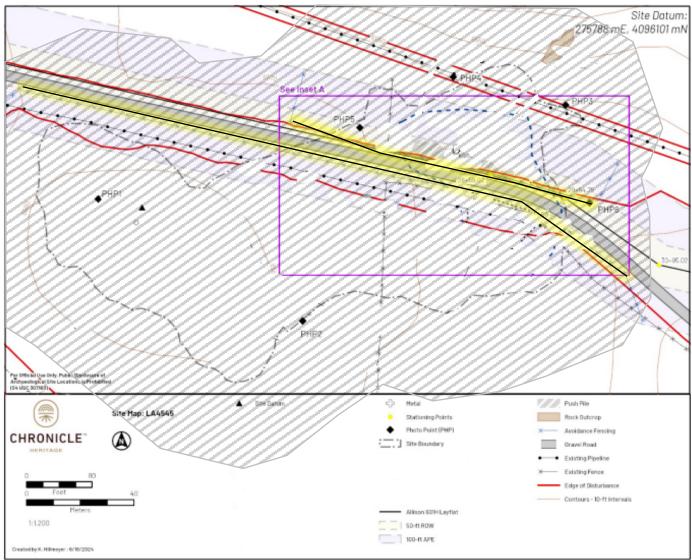


Figure 6-14. LA4545 site map.

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 =

T

TEMPORARY FENCING =

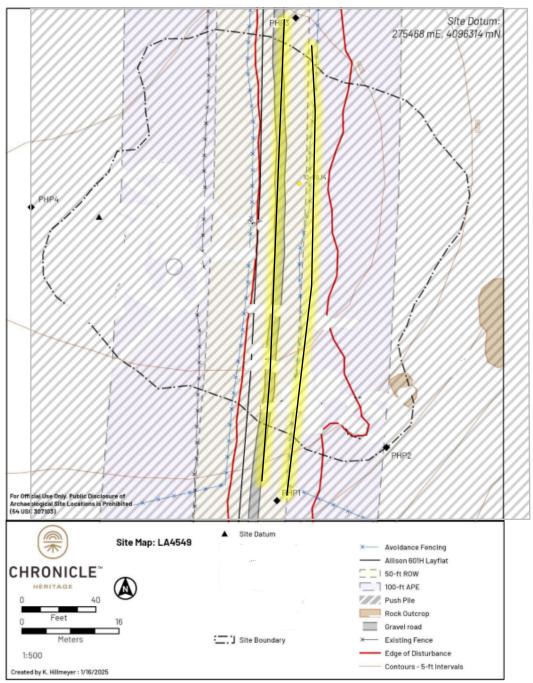


Figure 6-24. LA4549 site map.

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. Fencing must be placed in the existing disturbance area.

MONITOR ZONE =



TEMPORARY FENCING =

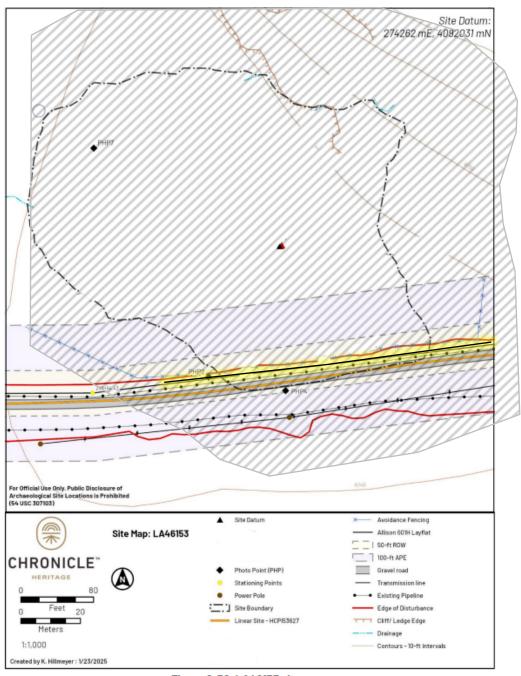


Figure 6-30. LA46153 site map.

CULTURAL RESOURCE STIPULATIONS

Farmington Field Office

BLM Report Number: 2025(II)014F

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

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

MONITOR ZONE =

TEMPORARY FENCING =



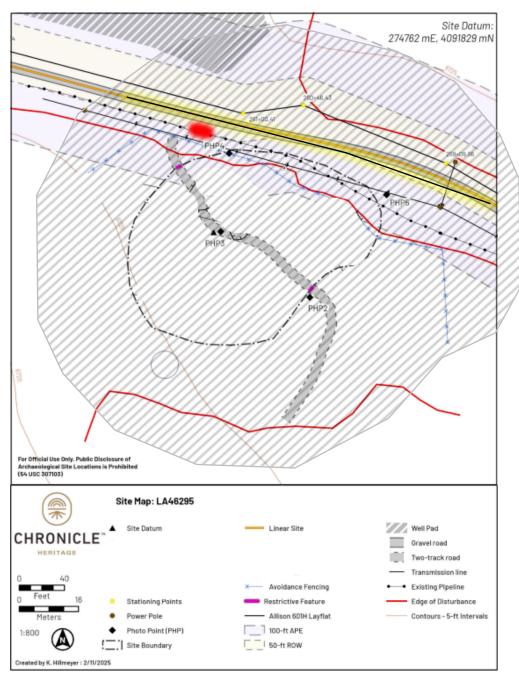


Figure 6-39. LA46295 site map.

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 =



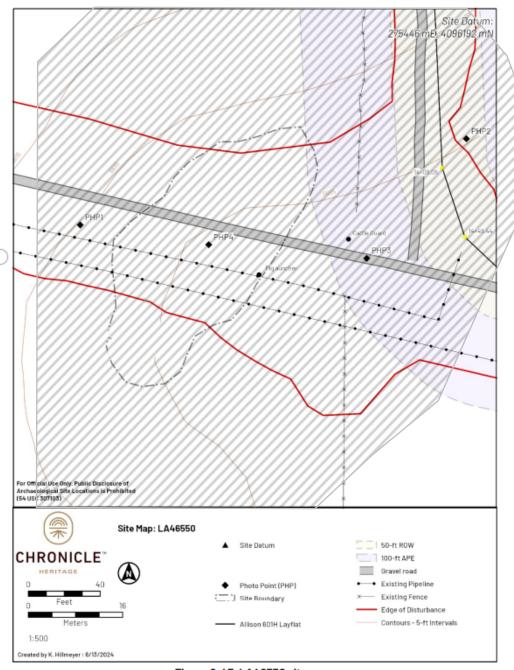


Figure 6-47. LA46550 site map.

For Official Use Only: Disclosure of site locations prohibited (43 CFR 7.18) DOI-BLM-NM-F010-2025-0015-EA

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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 =

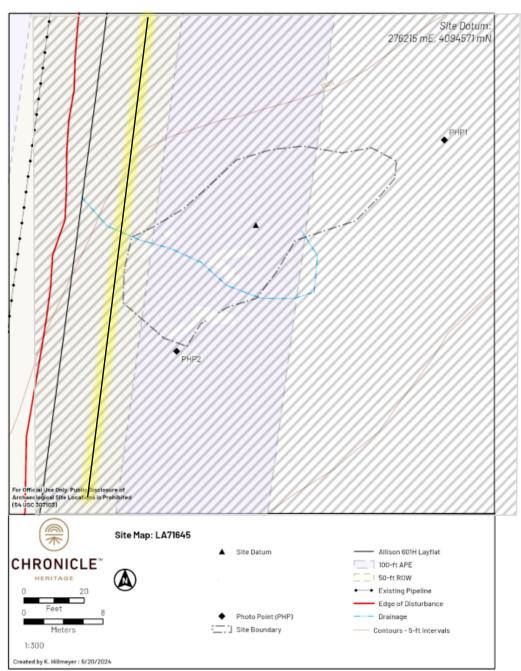


Figure 6-50. Site sketch map for LA71645.



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 601 FEDERAL COM 602H

Lease: NMNM078483A Agreement: TBD SH: SESW Section 12, T. 32 N., R. 7 W. San Juan County, New Mexico BH: Section 10, T. 32 N., R. 7 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. \boxtimes 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

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.

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING

I. <u>GENERAL</u>

- 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 $8-1/2 \times 11$ 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. <u>REPORTING REQUIREMENTS</u>

- 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

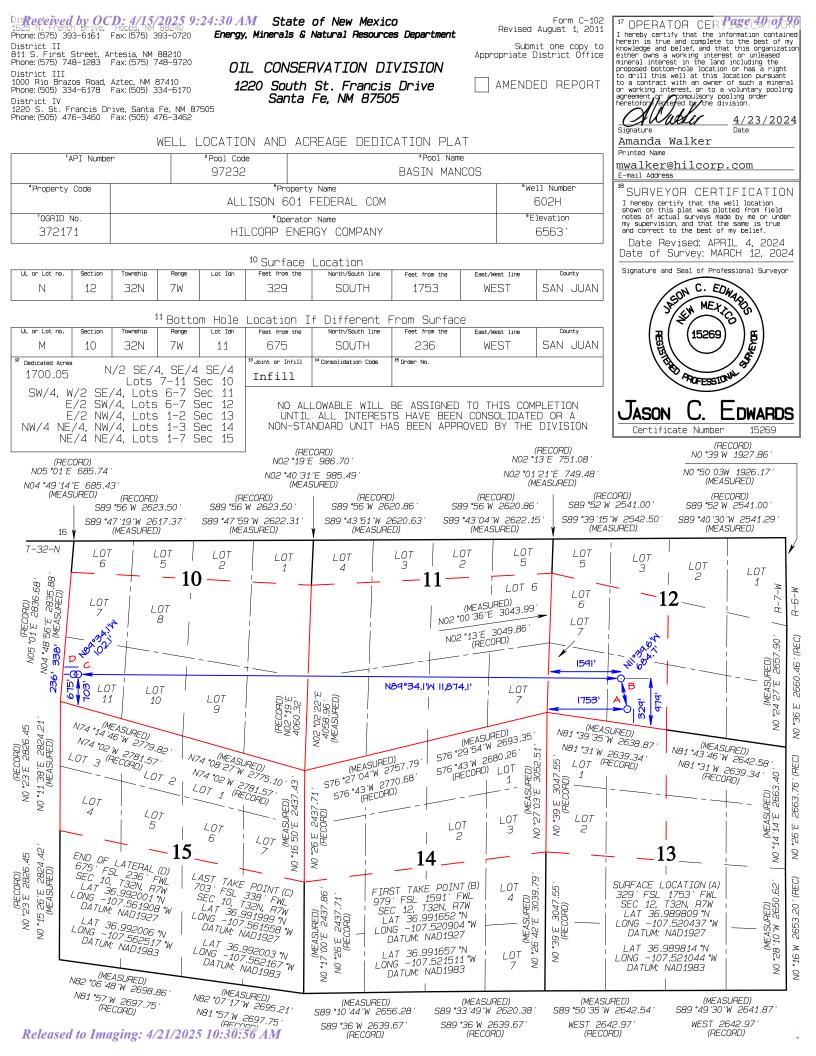
A. Any changes of plans required to mitigate unanticipated conditions encountered during drilling operations, will require approval as set forth in Section 1.I.

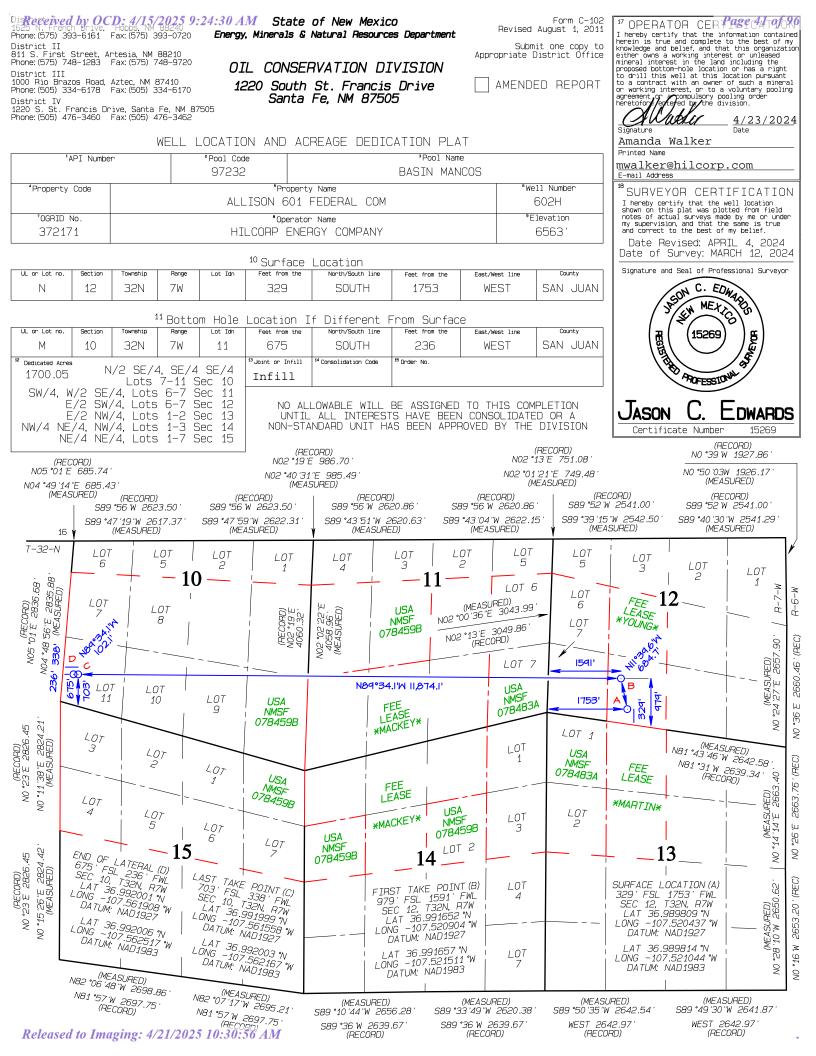
- B. If the well is dry, it is to be plugged in accordance with 43 CFR 3162.3-4, approval of the proposed plugging program is required as set forth in Section 1.I. The report should show the total depth reached, the reason for plugging, and the proposed intervals, by depths, where cement plugs are to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

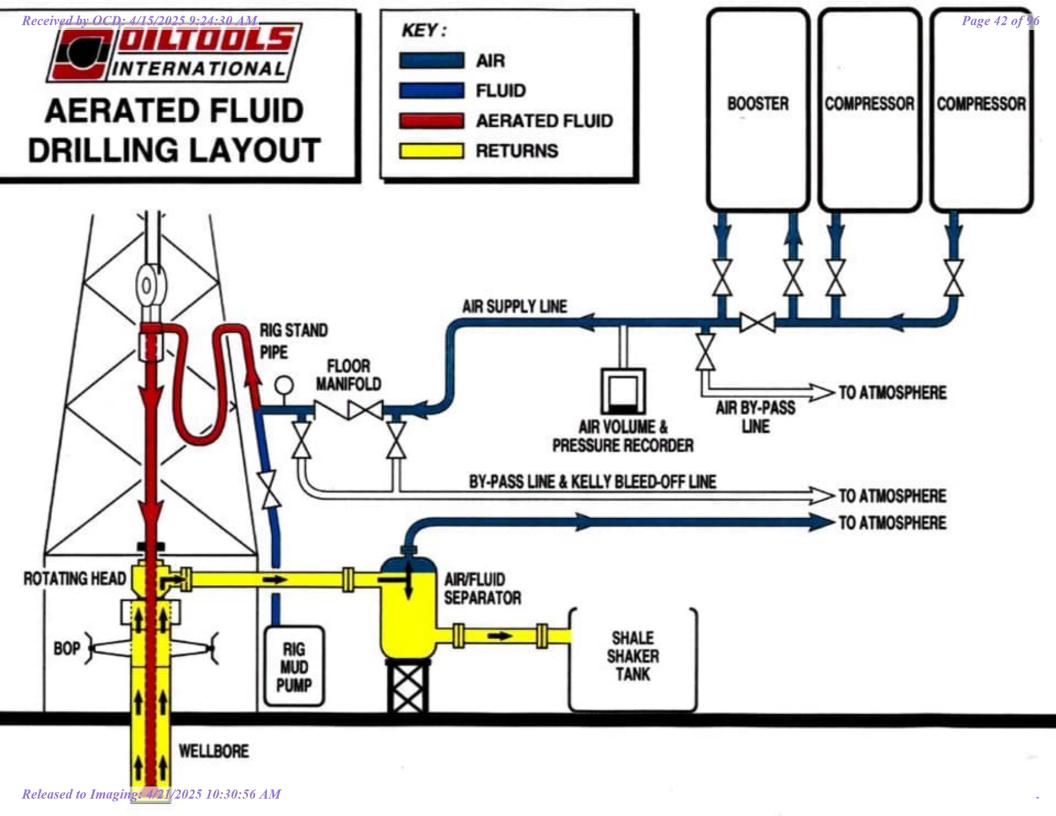
VII. PHONE NUMBERS

- 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









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 601 Federal Com 602H	Ground Elevation (ft. MSL):	6,564'
Surface Hole Location:	36.9898090° N, -107.5204370° W	Total Measured Depth (ft.)	19,471'
Bottom Hole Location:	36.9920015° N, -107.5619081° 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	7,084	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'	6,381' / 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'	19,471' / 7,108'	11,080 psi	12,360 psi	548,000 lbs	
			Proposed Ca	sing Design S	afety Factors				
Casing String	Burst De	esign SF	Collapse De	esign SF	Joint Tensile Design SF		Connection Tensile Design SF		
Surface	16	.7	8.8		44.7		47.7		
Intermediate	1.6	57	1.21		3.6		2.9		
Production	2.	8	3.0		1	.6	1.7		

Allison 601 Federal Com 602H



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 3 rd 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 ft³/sk – 5.14 gal/sk	15.8 ppg	Surface		
Intermediate	6,381'	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		
Interneulate	0,301	Tail	540ft ³	417	VariCem Cement – 25 % Excess 0.1% HR-5, 0.125 lb/sk Poly E Flake 1.295 ft³/sk – 5.69 gal/sk	13.5 ppg	5,000'		
Production	19,471'	Lead	3,658 ft ³	2,698	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' – 6,381'		
Production	Oil Base Mud	10.0 - 12.0	6 – 8	70/30 – 75/25	6,381' – 19,471'		

Notes:

- In the 8-1/2" production section, oil base mud will be utilized which will be an invert mud. The base fluid will be diesel. Brine fluid will be CaCl₂ or KCl.
- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 1,902 bbls (10,670 ft³).

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.

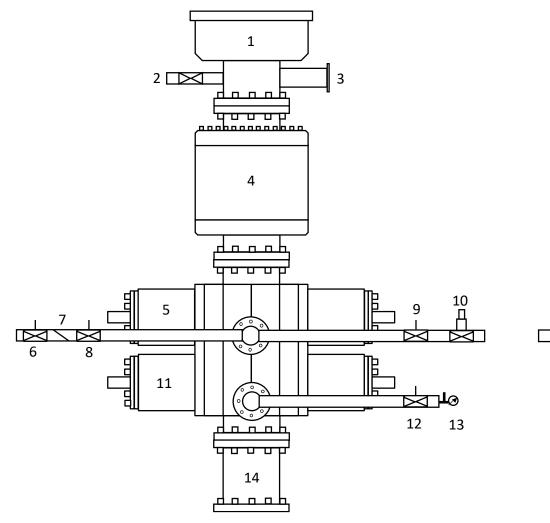
San Juan County, NM

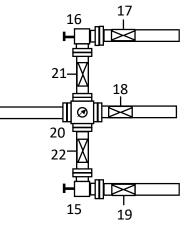
Allison 601 Federal Com 602H



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

Released to Imaging: 4/21/2025 10:30:56 AM

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

Received by OCD: 4/15/2025 9:24:30 AM

II. Type: \square Original \square Amendment due to \square 19.15.27.9.D(6)(a) NMAC \square 19.15.27.9.D(6)(b) NMAC \square 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	Anticipated	Anticipated
				Oil BBL/D	Gas MCF/D	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						<u>2025</u>
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: \boxtimes 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: \boxtimes 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.

 \boxtimes 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
			Start Date	or system segment rie-m

XI. Map. \Box 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 \Box will \Box 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 \Box does \Box 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).

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

XIV. Confidentiality: \Box 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:

 \boxtimes 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

 \Box 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. \Box 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. \Box 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: Mucher
Printed Name: Amanda Walker
Title: Operations/Regulatory Tech Sr.
E-mail Address: <u>mwalker@hilcorp.com</u>
Date: 4/18/2024
Phone: 346-237-2177
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Approved By: Title:
Title:
Title: Approval Date:
Title: Approval Date:
Title: Approval Date:

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.

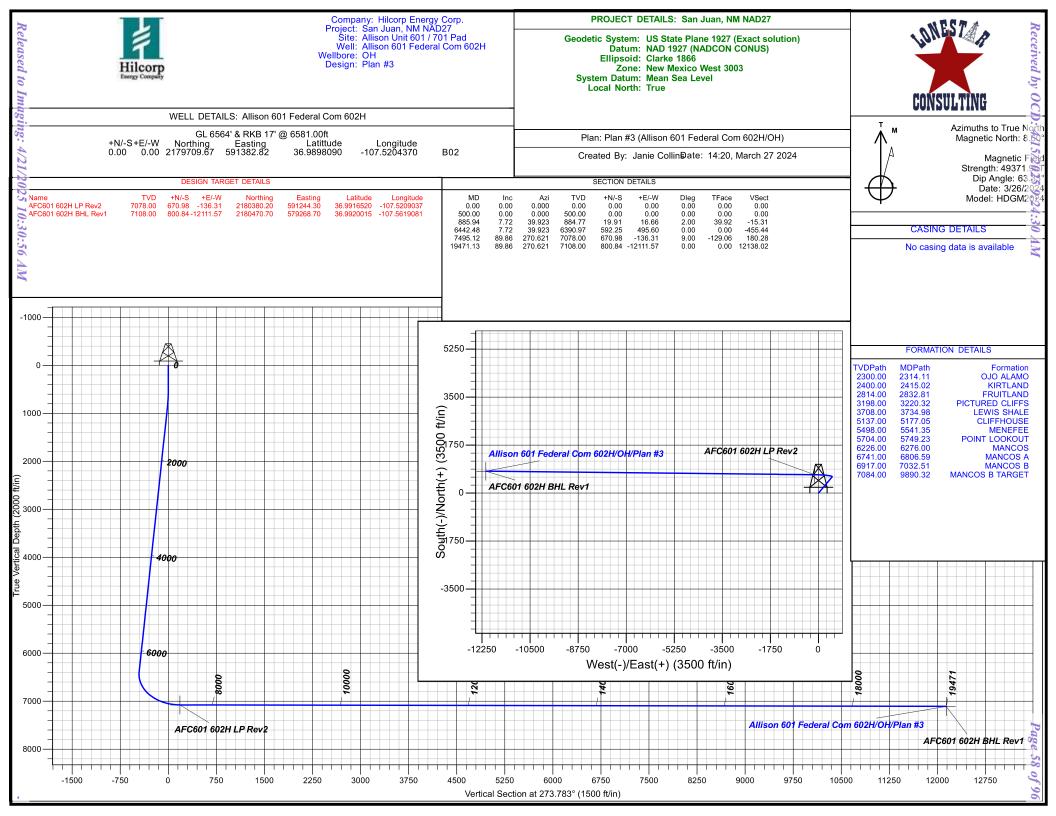
VII. Operational Practices 19.15.27.8 NMAC A through F

- 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.





Hilcorp Energy Corp.

San Juan, NM NAD27 Allison Unit 601 / 701 Pad Allison 601 Federal Com 602H - Slot B02

OH

Plan: Plan #3

Standard Planning Report

27 March, 2024





Lonestar Consulting, LLC

Planning Report



energy Compañy									00020711
Database:	Grand Junct	ion		Local C	o-ordinate Ref	erence:	Well Allison 6 B02	01 Federal Com	602H - Slot
company:	Hilcorp Ener	ay Corp.		TVD Re	ference:			KB 17' @ 6581.0	Oft
Project:	San Juan, N			MD Ref				KB 17' @ 6581.0	
lite:	Allison Unit 6	601 / 701 Pad			eference:		True	erre	
Vell:	Allison 601 F	ederal Com 6	02H	Survey	Calculation Me	thod:	Minimum Cur	vature	
Vellbore:	ОН								
)esign:	Plan #3								
Project	San Juan, NN	M NAD27							
	US State Plane NAD 1927 (NA	•	,	System [atum:		Mean Sea Leve	ł	
Map Zone:	New Mexico W	/est 3003							
Site	Allison Unit 6	01 / 701 Pad							
Site Position:			Northing:	2 17	9,734.79 usft	Latitude			36.98987
From:	Lat/Long		Easting:	,	1,382.74 usft	Longitud			-107.52043
Position Uncertainty:	0	0.00 ft	Slot Radius:		13.20 in	Longitut			101.02010
Well	Allison 601 Fe	ederal Com 60	2H - Slot B02						
Well Position	+N/-S	0.00 ft	Northing:		2,179,709.6	7 usft	Latitude:		36.98980
	+E/-W	0.00 ft	Easting:		591,382.8	2 usft	Longitude:		-107.52043
Position Uncertainty		0.00 ft	Wellhead E	levation:		ft	Ground Level:		6,564.00 f
Grid Convergence:		0.19°							
Wellbore	OH								
Magnetics	Model Na	ame	Sample Date		nation °)		Dip Angle (°)		trength IT)
	HDC	GM2024	3/26/202	24	8.60		63.33	49,3	71.9000000
Design	Plan #3								
Audit Notes:									
Version:			Phase:	PLAN	т	ie On Dept	h:	0.00	
Vertical Section:		Depth	From (TVD)	+N/-S	+	·E/-W	-	Direction	
			(ft)	(ft)		(ft)		(°) 273.783	
			0.00	0.00		0.00			

Plan Surve	ey Tool Progr	ram	Date	3/27/2024		
•		Depth To				
	(ft)	(ft)	Survey	(Wellbore)	Tool Name	Remarks
1	0.00	19,471.13	Plan #3	(OH)	MWD+HDGM	
					OWSG MWD + HDGM	
	Dept	Depth From (ft)	(ft) (ft)	Depth From Depth To (ft) (ft) Survey	Depth From Depth To (ft) (ft) Survey (Wellbore)	Depth From (ft) Depth To (ft) Tool Name 1 0.00 19,471.13 Plan #3 (OH) 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	
885.94	7.72	39.923	884.77	19.91	16.66	2.00	2.00	0.00	39.92	
6,442.48	7.72	39.923	6,390.97	592.25	495.60	0.00	0.00	0.00	0.00	
7,495.12	89.86	270.621	7,078.00	670.98	-136.31	9.00	7.80	-12.28	-129.06	AFC601 602H LP Rev
19,471.13	89.86	270.621	7,108.00	800.84	-12,111.57	0.00	0.00	0.00	0.00	AFC601 602H BHL R

3/27/2024 2:16:17PM



Lonestar Consulting, LLC

Planning Report



	d Junction	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot B02
Company: Hilcorp	p Energy Corp.	TVD Reference:	GL 6564' & RKB 17' @ 6581.00ft
Project: San Ju	luan, NM NAD27	MD Reference:	GL 6564' & RKB 17' @ 6581.00ft
Site: Allison	n Unit 601 / 701 Pad	North Reference:	True
Well: Allison	n 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore: OH			
Design: Plan #	#3		

Planned Survey

(ft) (°) (°) (ft) (0.00 0.00 0.00 0.00 0.00 2.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00 0.00 2.00	0.00 0.00 0.00 0.00 0.00 0.00
100.00 0.00 0.000 100.00 0.00 0.00 0.00 200.00 0.00 0.00 200.00 0.00 0.00 0.00 300.00 0.00 0.000 300.00 0.00 0.00 0.00 400.00 0.00 0.000 300.00 0.00 0.00 0.00 500.00 0.00 0.000 500.00 0.00 0.00 0.00 600.00 2.00 39.923 599.98 1.34 1.12 -1.03 700.00 4.00 39.923 699.84 5.35 4.48 -4.12 800.00 6.00 39.923 799.45 12.04 10.07 -9.26 885.94 7.72 39.923 898.71 21.36 17.87 -16.42 900.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,000.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00 0.00 0.00 0.00 2.00 2.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
200.00 0.00 0.000 200.00 0.00 0.00 0.00 300.00 0.00 0.000 300.00 0.00 0.00 0.00 400.00 0.00 0.000 300.00 0.00 0.00 0.00 500.00 0.00 0.000 500.00 0.00 0.00 0.00 600.00 2.00 39.923 599.98 1.34 1.12 -1.03 700.00 4.00 39.923 699.84 5.35 4.48 -4.12 800.00 6.00 39.923 799.45 12.04 10.07 -9.26 885.94 7.72 39.923 898.71 21.36 17.87 -16.42 900.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00 0.00 0.00 2.00 2.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00
300.00 0.00 0.000 300.00 0.00 0.00 0.00 400.00 0.00 0.000 400.00 0.00 0.00 0.00 500.00 0.00 0.000 500.00 0.00 0.00 0.00 600.00 2.00 39.923 599.98 1.34 1.12 -1.03 700.00 4.00 39.923 699.84 5.35 4.48 -4.12 800.00 6.00 39.923 799.45 12.04 10.07 -9.26 885.94 7.72 39.923 898.71 21.36 17.87 -16.42 1,000.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00 0.00 2.00 2.00	0.00 0.00 0.00	0.00 0.00
400.00 0.00 0.000 400.00 0.00 0.00 0.00 500.00 0.00 0.000 500.00 0.00 0.00 0.00 600.00 2.00 39.923 599.98 1.34 1.12 -1.03 700.00 4.00 39.923 699.84 5.35 4.48 -4.12 800.00 6.00 39.923 799.45 12.04 10.07 -9.26 885.94 7.72 39.923 898.71 19.91 16.66 -15.31 900.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,000.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00 0.00 2.00 2.00	0.00 0.00	0.00
500.00 0.00 0.000 500.00 0.00 0.00 0.00 600.00 2.00 39.923 599.98 1.34 1.12 -1.03 700.00 4.00 39.923 699.84 5.35 4.48 -4.12 800.00 6.00 39.923 799.45 12.04 10.07 -9.26 885.94 7.72 39.923 898.71 19.91 16.66 -15.31 900.00 7.72 39.923 898.71 21.36 17.87 -16.42 1,000.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00 2.00 2.00	0.00	
600.002.0039.923599.981.341.12-1.03700.004.0039.923699.845.354.48-4.12800.006.0039.923799.4512.0410.07-9.26885.947.7239.923884.7719.9116.66-15.31900.007.7239.923898.7121.3617.87-16.421,000.007.7239.923997.8031.6626.49-24.341,100.007.7239.9231,096.8941.9635.11-32.26	2.00 2.00		0.00
700.004.0039.923699.845.354.48-4.12800.006.0039.923799.4512.0410.07-9.26885.947.7239.923884.7719.9116.66-15.31900.007.7239.923898.7121.3617.87-16.421,000.007.7239.923997.8031.6626.49-24.341,100.007.7239.9231,096.8941.9635.11-32.26	2.00	2.00	0.00
800.00 6.00 39.923 799.45 12.04 10.07 -9.26 885.94 7.72 39.923 884.77 19.91 16.66 -15.31 900.00 7.72 39.923 898.71 21.36 17.87 -16.42 1,000.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26		2.00	0.00
885.94 7.72 39.923 884.77 19.91 16.66 -15.31 900.00 7.72 39.923 898.71 21.36 17.87 -16.42 1,000.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26		2.00	0.00
1,000.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	2.00	2.00	0.00
1,000.00 7.72 39.923 997.80 31.66 26.49 -24.34 1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00	0.00	0.00
1,100.00 7.72 39.923 1,096.89 41.96 35.11 -32.26	0.00	0.00	0.00
	0.00	0.00	0.00
1,200.00 7.72 39.923 1,195.99 52.26 43.73 -40.19	0.00	0.00	0.00
1,300.00 7.72 39.923 1,295.08 62.56 52.35 -48.11	0.00	0.00	0.00
1,400.00 7.72 39.923 1,394.18 72.86 60.97 -56.03	0.00	0.00	0.00
1,500.00 7.72 39.923 1,493.27 83.16 69.59 -63.95	0.00	0.00	0.00
1,600.00 7.72 39.923 1,592.36 93.46 78.21 -71.87	0.00	0.00	0.00
1,700.00 7.72 39.923 1,691.46 103.76 86.83 -79.79	0.00	0.00	0.00
1,800.00 7.72 39.923 1,790.55 114.06 95.44 -87.71	0.00	0.00	0.00
1,900.00 7.72 39.923 1,889.65 124.36 104.06 -95.63	0.00	0.00	0.00
2,000.00 7.72 39.923 1,988.74 134.66 112.68 -103.55	0.00	0.00	0.00
2,100.00 7.72 39.923 2,087.83 144.96 121.30 -111.47	0.00	0.00	0.00
2,200.00 7.72 39.923 2,186.93 155.26 129.92 -119.40	0.00	0.00	0.00
2,300.00 7.72 39.923 2,286.02 165.56 138.54 -127.32	0.00	0.00	0.00
2,400.00 7.72 39.923 2,385.12 175.86 147.16 -135.24	0.00	0.00	0.00
2,500.00 7.72 39.923 2,484.21 186.16 155.78 -143.16	0.00	0.00	0.00
2,600.00 7.72 39.923 2,583.30 196.46 164.40 -151.08	0.00	0.00	0.00
2,700.00 7.72 39.923 2,682.40 206.76 173.02 -159.00	0.00	0.00	0.00
2,800.00 7.72 39.923 2,781.49 217.06 181.64 -166.92	0.00	0.00	0.00
2,900.00 7.72 39.923 2,880.59 227.36 190.26 -174.84	0.00	0.00	0.00
3,000.00 7.72 39.923 2,979.68 237.66 198.88 -182.76	0.00	0.00	0.00
3,100.00 7.72 39.923 3,078.77 247.96 207.50 -190.68	0.00	0.00	0.00
3,200.00 7.72 39.923 3,177.87 258.26 216.12 -198.61	0.00	0.00	0.00
3,300.00 7.72 39.923 3,276.96 268.56 224.74 -206.53	0.00	0.00	0.00
3,400.00 7.72 39.923 3,376.05 278.86 233.35 -214.45	0.00	0.00	0.00
3,500.00 7.72 39.923 3,475.15 289.17 241.97 -222.37	0.00	0.00	0.00
3,600.00 7.72 39.923 3,574.24 299.47 250.59 -230.29	0.00	0.00	0.00
3,700.00 7.72 39.923 3,673.34 309.77 259.21 -238.21	0.00	0.00	0.00
3,800.00 7.72 39.923 3,772.43 320.07 267.83 -246.13	0.00	0.00	0.00
3,900.00 7.72 39.923 3,871.52 330.37 276.45 -254.05	0.00	0.00	0.00
4,000.00 7.72 39.923 3,970.62 340.67 285.07 -261.97	0.00	0.00	0.00
4,100.00 7.72 39.923 4,069.71 350.97 293.69 -269.89	0.00	0.00	0.00
4,200.00 7.72 39.923 4,168.81 361.27 302.31 -277.82	0.00	0.00	0.00
4,300.00 7.72 39.923 4,267.90 371.57 310.93 -285.74	0.00	0.00	0.00
4,400.00 7.72 39.923 4,366.99 381.87 319.55 -293.66	0.00	0.00	0.00
4,500.00 7.72 39.923 4,466.09 392.17 328.17 -301.58	0.00	0.00	0.00
4,600.00 7.72 39.923 4,565.18 402.47 336.79 -309.50	0.00	0.00	0.00
4,700.00 7.72 39.923 4,664.28 412.77 345.41 -317.42	0.00	0.00	0.00
4,800.00 7.72 39.923 4,763.37 423.07 354.03 -325.34	0.00	0.00	0.00
4,900.00 7.72 39.923 4,862.46 433.37 362.65 -333.26	0.00	0.00	0.00
5,000.00 7.72 39.923 4,961.56 443.67 371.27 -341.18	0.00	0.00	0.00
5,100.00 7.72 39.923 5,060.65 453.97 379.88 -349.10	0.00	0.00	0.00

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COMPASS 5000.16 Build 100



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot B02
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 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #3		

Planned Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100usft)	(°/100usft)	(°/100usft)
5,200.00	7.72	39.923	5,159.75	464.27	388.50	-357.03	0.00	0.00	0.00
5,300.00	7.72	39.923	5,258.84	474.57	397.12	-364.95	0.00	0.00	0.00
5,400.00	7.72	39.923	5,357.93	484.87	405.74	-372.87	0.00	0.00	0.00
5,500.00	7.72	39.923	5,457.03	495.17	414.36	-380.79	0.00	0.00	0.00
5,600.00	7.72	39.923	5,556.12	505.47	422.98	-388.71	0.00	0.00	0.00
5,700.00	7.72	39.923	5,655.22	515.77	431.60	-396.63	0.00	0.00	0.00
5,800.00	7.72	39.923	5,754.31	526.07	440.22	-404.55	0.00	0.00	0.00
5,900.00	7.72	39.923	5,853.40	536.37	448.84	-412.47	0.00	0.00	0.00
6,000.00	7.72	39.923	5,952.50	546.67	457.46	-420.39	0.00	0.00	0.00
6,100.00	7.72	39.923	6,051.59	556.97	466.08	-428.32	0.00	0.00	0.00
6,200.00	7.72	39.923	6,150.69	567.28	474.70	-436.24	0.00	0.00	0.00
6,300.00	7.72	39.923	6,249.78	577.58	483.32	-444.16	0.00	0.00	0.00
6,400.00	7.72	39.923	6,348.87	587.88	491.94	-452.08	0.00	0.00	0.00
6,442.48	7.72	39.923	6,390.97	592.25	495.60	-455.44	0.00	0.00	0.00
6,500.00	5.99	357.783	6,448.11	598.22	495.00	-457.41	9.00	-3.00	-73.27
6,600.00	11.04	303.112	6,547.11	608.69	489.72	-448.50	9.00	5.05	-54.67
6,700.00	19.22	288.113	6,643.60	619.06	466.01	-424.15	9.00	8.18	-15.00
-									
6,800.00 6,900.00	27.89 36.72	282.032 278.688	6,735.19 6,819.64	629.07 638.48	427.41 374.88	-384.98 -331.93	9.00 9.00	8.68 8.82	-6.08 -3.34
7,000.00 7,100.00	45.60	276.499	6,894.85 6,958.99	647.06 654.59	309.69	-266.33 -189.78	9.00 9.00	8.89 8.92	-2.19 -1.61
7,100.00	54.52 63.45	274.893 273.609	6,958.99 7,010.46	654.59 660.89	233.48 148.09	-189.78 -104.17	9.00 9.00	8.92 8.93	-1.28
-									
7,300.00	72.39	272.513	7,048.01	665.81	55.65	-11.60	9.00	8.94	-1.10
7,400.00	81.34	271.521	7,070.71	669.22	-41.57	85.64	9.00	8.95	-0.99
7,495.12	89.86	270.621	7,078.00	670.98	-136.31	180.28	9.00	8.95	-0.95
7,500.00	89.86	270.621	7,078.01	671.04	-141.19	185.15	0.00	0.00	0.00
7,600.00	89.86	270.621	7,078.26	672.12	-241.18	285.00	0.00	0.00	0.00
7,700.00	89.86	270.621	7,078.51	673.21	-341.18	384.85	0.00	0.00	0.00
7,800.00	89.86	270.621	7,078.76	674.29	-441.17	484.70	0.00	0.00	0.00
7,900.00	89.86	270.621	7,079.01	675.37	-541.16	584.54	0.00	0.00	0.00
8,000.00	89.86	270.621	7,079.26	676.46	-641.16	684.39	0.00	0.00	0.00
8,100.00	89.86	270.621	7,079.52	677.54	-741.15	784.24	0.00	0.00	0.00
8,200.00	89.86	270.621	7,079.77	678.63	-841.14	884.09	0.00	0.00	0.00
8,300.00	89.86	270.621	7,080.02	679.71	-941.14	983.93	0.00	0.00	0.00
8,400.00	89.86	270.621	7,080.27	680.80	-1,041.13	1,083.78	0.00	0.00	0.00
8,500.00	89.86	270.621	7,080.52	681.88	-1,141.13	1,183.63	0.00	0.00	0.00
8,600.00	89.86	270.621	7,080.77	682.96	-1,241.12	1,283.48	0.00	0.00	0.00
8,700.00	89.86	270.621	7,081.02	684.05	-1,341.11	1,383.32	0.00	0.00	0.00
8,800.00	89.86	270.621	7,081.27	685.13	-1,441.11	1,483.17	0.00	0.00	0.00
8,900.00	89.86	270.621	7,081.52	686.22	-1,541.10	1,583.02	0.00	0.00	0.00
9,000.00	89.86	270.621	7,081.77	687.30	-1,641.09	1,682.87	0.00	0.00	0.00
9,100.00	89.86	270.621	7,082.02	688.39	-1,741.09	1,782.71	0.00	0.00	0.00
9,200.00	89.86	270.621	7,082.27	689.47	-1,841.08	1,882.56	0.00	0.00	0.00
9,200.00	89.86	270.621	7,082.52	690.55	-1,941.08 -1,941.08	1,982.41	0.00	0.00	0.00
9,400.00	89.86	270.621	7,082.77	691.64	-2,041.07	2,082.26	0.00	0.00	0.00
9,500.00	89.86	270.621	7,083.02	692.72	-2,141.06	2,002.20	0.00	0.00	0.00
9,600.00	89.86	270.621	7,083.27	693.81	-2,241.06	2,281.95	0.00	0.00	0.00
9,700.00	89.86	270.621	7,083.52	694.89	-2,341.05	2,381.80	0.00	0.00	0.00
9,800.00 9,900.00	89.86 80.86	270.621	7,083.77 7,084.02	695.97 697.06	-2,441.05	2,481.65	0.00	0.00	0.00
9,900.00	89.86 89.86	270.621 270.621	7,084.02 7,084.27	697.06 698.14	-2,541.04 -2,641.03	2,581.49 2,681.34	0.00 0.00	0.00 0.00	0.00 0.00
10,000.00	89.86	270.621	7,084.27	698.14 699.23	-2,641.03 -2,741.03	2,001.34 2,781.19	0.00	0.00	0.00
-									
10,200.00	89.86	270.621	7,084.78	700.31	-2,841.02	2,881.04	0.00	0.00	0.00

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COMPASS 5000.16 Build 100



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot B02
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 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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	89.86	270.621	7,085.03	701.40	-2,941.01	2,980.88	0.00	0.00	0.00	
10,400.00	89.86	270.621	7,085.28	702.48	-3,041.01	3,080.73	0.00	0.00	0.00	
10,500.00	89.86	270.621	7,085.53	703.56	-3,141.00	3,180.58	0.00	0.00	0.00	
10,600.00	89.86	270.621	7,085.78	704.65	-3,241.00	3,280.43	0.00	0.00	0.00	
-						,				
10,700.00	89.86	270.621	7,086.03	705.73	-3,340.99	3,380.27	0.00	0.00	0.00	
10,800.00	89.86	270.621	7,086.28	706.82	-3,440.98	3,480.12	0.00	0.00	0.00	
10,900.00	89.86	270.621	7,086.53	707.90	-3,540.98	3,579.97	0.00	0.00	0.00	
11,000.00	89.86	270.621	7,086.78 7,087.03	708.99 710.07	-3,640.97	3,679.81	0.00 0.00	0.00	0.00 0.00	
11,100.00	89.86	270.621	7,007.03	710.07	-3,740.96	3,779.66	0.00	0.00	0.00	
11,200.00	89.86	270.621	7,087.28	711.15	-3,840.96	3,879.51	0.00	0.00	0.00	
11,300.00	89.86	270.621	7,087.53	712.24	-3,940.95	3,979.36	0.00	0.00	0.00	
11,400.00	89.86	270.621	7,087.78	713.32	-4,040.95	4,079.20	0.00	0.00	0.00	
11,500.00	89.86	270.621	7,088.03	714.41	-4,140.94	4,179.05	0.00	0.00	0.00	
11,600.00	89.86	270.621	7,088.28	715.49	-4,240.93	4,278.90	0.00	0.00	0.00	
11,700.00	89.86	270.621	7,088.53	716.58	-4,340.93	4,378.75	0.00	0.00	0.00	
11,800.00	89.86	270.621	7,088.78	717.66	-4,440.92	4,478.59	0.00	0.00	0.00	
11,900.00	89.86	270.621	7,089.03	718.74	-4,540.92	4,578.44	0.00	0.00	0.00	
12,000.00	89.86	270.621	7,089.28	719.83	-4,640.91	4,678.29	0.00	0.00	0.00	
12,100.00	89.86	270.621	7,089.54	720.91	-4,740.90	4,778.14	0.00	0.00	0.00	
12,200.00	89.86	270.621	7,089.79	722.00	-4,840.90	4,877.98	0.00	0.00	0.00	
12,300.00	89.86	270.621	7.090.04	723.08	-4,940.89	4,977.83	0.00	0.00	0.00	
12,400.00	89.86	270.621	7,090.29	724.17	-5,040.88	5,077.68	0.00	0.00	0.00	
12,500.00	89.86	270.621	7,090.54	725.25	-5,140.88	5,177.53	0.00	0.00	0.00	
12,600.00	89.86	270.621	7,090.79	726.33	-5,240.87	5,277.37	0.00	0.00	0.00	
12,700.00	89.86	270.621	7,091.04	727.42	-5,340.87	5,377.22	0.00	0.00	0.00	
12,800.00	89.86	270.621	7,091.29	728.50	-5,440.87	5,477.07	0.00	0.00	0.00	
12,900.00	89.86	270.621	7,091.54	729.59	-5,540.85	5,576.92	0.00	0.00	0.00	
13,000.00	89.86	270.621	7,091.79	730.67	-5,640.85	5,676.76	0.00	0.00	0.00	
13,100.00	89.86	270.621	7,092.04	731.76	-5,740.84	5,776.61	0.00	0.00	0.00	
-										
13,200.00	89.86	270.621	7,092.29	732.84	-5,840.83	5,876.46	0.00	0.00	0.00	
13,300.00	89.86	270.621	7,092.54 7,092.79	733.92 735.01	-5,940.83	5,976.31 6,076.15	0.00 0.00	0.00 0.00	0.00 0.00	
13,400.00	89.86	270.621	7,092.79		-6,040.82		0.00		0.00	
13,500.00 13,600.00	89.86 89.86	270.621 270.621	7,093.04	736.09 737.18	-6,140.82 -6,240.81	6,176.00 6,275.85	0.00	0.00 0.00	0.00	
13,700.00	89.86	270.621	7,093.54	738.26	-6,340.80	6,375.70	0.00	0.00	0.00	
13,800.00	89.86	270.621	7,093.79	739.35	-6,440.80	6,475.54	0.00	0.00	0.00	
13,900.00	89.86	270.621	7,094.04	740.43	-6,540.79	6,575.39	0.00	0.00	0.00	
14,000.00 14,100.00	89.86 89.86	270.621 270.621	7,094.29 7,094.55	741.51 742.60	-6,640.79	6,675.24 6,775.09	0.00 0.00	0.00 0.00	0.00 0.00	
-					-6,740.78					
14,200.00	89.86	270.621	7,094.80	743.68	-6,840.77	6,874.93	0.00	0.00	0.00	
14,300.00	89.86	270.621	7,095.05	744.77	-6,940.77	6,974.78	0.00	0.00	0.00	
14,400.00	89.86	270.621	7,095.30	745.85	-7,040.76	7,074.63	0.00	0.00	0.00	
14,500.00	89.86	270.621	7,095.55	746.94	-7,140.75	7,174.48	0.00	0.00	0.00	
14,600.00	89.86	270.621	7,095.80	748.02	-7,240.75	7,274.32	0.00	0.00	0.00	
14,700.00	89.86	270.621	7,096.05	749.10	-7,340.74	7,374.17	0.00	0.00	0.00	
14,800.00	89.86	270.621	7,096.30	750.19	-7,440.74	7,474.02	0.00	0.00	0.00	
14,900.00	89.86	270.621	7,096.55	751.27	-7,540.73	7,573.87	0.00	0.00	0.00	
15,000.00	89.86	270.621	7,096.80	752.36	-7,640.72	7,673.71	0.00	0.00	0.00	
15,100.00	89.86	270.621	7,097.05	753.44	-7,740.72	7,773.56	0.00	0.00	0.00	
15,200.00	89.86	270.621	7,097.30	754.53	-7,840.71	7,873.41	0.00	0.00	0.00	
15,300.00	89.86	270.621	7,097.55	755.61	-7,940.70	7,973.26	0.00	0.00	0.00	
15,400.00	89.86	270.621	7,097.80	756.69	-8,040.70	8,073.10	0.00	0.00	0.00	
15,500.00	89.86	270.621	7,098.05	757.78	-8,140.69	8,172.95	0.00	0.00	0.00	

3/27/2024 2:16:17PM

COMPASS 5000.16 Build 100



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot B02
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 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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	89.86	270.621	7,098.30	758.86	-8,240.69	8,272.80	0.00	0.00	0.00
	15,700.00	89.86	270.621	7,098.55	759.95	-8,340.68	8,372.65	0.00	0.00	0.00
	15,800.00	89.86	270.621	7,098.80	761.03	-8,440.67	8,472.49	0.00	0.00	0.00
	15,900.00	89.86	270.621	7,099.05	762.12	-8,540.67	8,572.34	0.00	0.00	0.00
	16,000.00	89.86	270.621	7,099.30	763.20	-8,640.66	8,672.19	0.00	0.00	0.00
	16,100.00	89.86	270.621	7,099.56	764.28	-8,740.66	8,772.04	0.00	0.00	0.00
	16,200.00	89.86	270.621	7,099.81	765.37	-8,840.65	8,871.88	0.00	0.00	0.00
	16,300.00	89.86	270.621	7,100.06	766.45	-8,940.64	8,971.73	0.00	0.00	0.00
	16,400.00	89.86	270.621	7,100.31	767.54	-9,040.64	9,071.58	0.00	0.00	0.00
	16,500.00	89.86	270.621	7,100.56	768.62	-9,140.63	9,171.43	0.00	0.00	0.00
1	16,600.00	89.86	270.621	7,100.81	769.70	-9,240.62	9,271.27	0.00	0.00	0.00
	16,700.00	89.86	270.621	7,101.06	770.79	-9,340.62	9,371.12	0.00	0.00	0.00
	16,800.00	89.86	270.621	7,101.31	771.87	-9,440.61	9,470.97	0.00	0.00	0.00
	16,900.00	89.86	270.621	7,101.56	772.96	-9,540.61	9,570.82	0.00	0.00	0.00
	17,000.00	89.86	270.621	7,101.81	774.04	-9,640.60	9,670.66	0.00	0.00	0.00
	17,100.00	89.86	270.621	7,102.06	775.13	-9,740.59	9,770.51	0.00	0.00	0.00
	17,200.00	89.86	270.621	7,102.31	776.21	-9,840.59	9,870.36	0.00	0.00	0.00
	17,300.00	89.86	270.621	7,102.56	777.29	-9,940.58	9,970.21	0.00	0.00	0.00
	17,400.00	89.86	270.621	7,102.81	778.38	-10,040.57	10,070.05	0.00	0.00	0.00
	17,500.00	89.86	270.621	7,103.06	779.46	-10,140.57	10,169.90	0.00	0.00	0.00
	17,600.00	89.86	270.621	7,103.31	780.55	-10,240.56	10,269.75	0.00	0.00	0.00
	17,700.00	89.86	270.621	7,103.56	781.63	-10,340.56	10,369.60	0.00	0.00	0.00
	17,800.00	89.86	270.621	7,103.81	782.72	-10,440.55	10,469.44	0.00	0.00	0.00
	17,900.00	89.86	270.621	7,104.06	783.80	-10,540.54	10,569.29	0.00	0.00	0.00
	18,000.00	89.86	270.621	7,104.31	784.88	-10,640.54	10,669.14	0.00	0.00	0.00
	18,100.00	89.86	270.621	7,104.57	785.97	-10,740.53	10,768.99	0.00	0.00	0.00
	18,200.00	89.86	270.621	7,104.82	787.05	-10,840.53	10,868.83	0.00	0.00	0.00
	18,300.00	89.86	270.621	7,105.07	788.14	-10,940.52	10,968.68	0.00	0.00	0.00
	18,400.00	89.86	270.621	7,105.32	789.22	-11,040.51	11,068.53	0.00	0.00	0.00
	18,500.00	89.86	270.621	7,105.57	790.31	-11,140.51	11,168.38	0.00	0.00	0.00
	18,600.00	89.86	270.621	7,105.82	791.39	-11,240.50	11,268.22	0.00	0.00	0.00
	18,700.00	89.86	270.621	7,106.07	792.47	-11,340.49	11,368.07	0.00	0.00	0.00
	18,800.00	89.86	270.621	7,106.32	793.56	-11,440.49	11,467.92	0.00	0.00	0.00
	18,900.00	89.86	270.621	7,106.57	794.64	-11,540.48	11,567.77	0.00	0.00	0.00
	19,000.00	89.86	270.621	7,106.82	795.73	-11,640.48	11,667.61	0.00	0.00	0.00
	19,100.00	89.86	270.621	7,107.07	796.81	-11,740.47	11,767.46	0.00	0.00	0.00
	19,200.00	89.86	270.621	7,107.32	797.90	-11,840.46	11,867.31	0.00	0.00	0.00
	19,300.00	89.86	270.621	7,107.57	798.98	-11,940.46	11,967.16	0.00	0.00	0.00
	19,400.00	89.86	270.621	7,107.82	800.06	-12,040.45	12,067.00	0.00	0.00	0.00
	19,471.13	89.86	270.621	7,108.00	800.84	-12,111.57	12,138.02	0.00	0.00	0.00



Lonestar Consulting, LLC

Planning Report



Database:	Grand Junction	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot B02
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 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #3		
Design Targets			

Design	largets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
AFC601 602H LP Rev2 - plan hits target cen - Point	0.00 ter	0.000	7,078.00	670.98	-136.31	2,180,380.20	591,244.30	36.9916520	-107.5209038
AFC601 602H BHL Rev [.] - plan hits target cen - Point	0.00 ter	0.000	7,108.00	800.84	-12,111.57	2,180,470.70	579,268.70	36.9920014	-107.5619081

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
2,314.11	2,300.00	OJO ALAMO		0.00	0.000	
2,415.02	2,400.00	KIRTLAND		0.00	0.000	
2,832.81	2,814.00	FRUITLAND		0.00	0.000	
3,220.32	3,198.00	PICTURED CLIFFS		0.00	0.000	
3,734.98	3,708.00	LEWIS SHALE		0.00	0.000	
5,177.05	5,137.00	CLIFFHOUSE		0.00	0.000	
5,541.35	5,498.00	MENEFEE		0.00	0.000	
5,749.23	5,704.00	POINT LOOKOUT		0.00	0.000	
6,276.00	6,226.00	MANCOS		0.00	0.000	
6,806.59	6,741.00	MANCOS A		0.00	0.000	
7,032.51	6,917.00	MANCOS B		0.00	0.000	
9,890.33	7,084.00	MANCOS B TARGET		0.00	0.000	

U.S. Department of the Interior		Sundry Print Repor
BUREAU OF LAND MANAGEMENT		and the second
Well Name: ALLISON 601 FEDERAL COM	Well Location: T32N / R07W / SEC 12 / SESW / 36.989814 / -107.521044	County or Parish/State: SAN JUAN / NM
Well Number: 602H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078483A	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: HILCORP ENERGY COMPANY	

Notice of Intent

Sundry ID: 2847184

Type of Submission: Notice of Intent

Date Sundry Submitted: 04/15/2025

Date proposed operation will begin: 04/21/2025

Type of Action: APD Change Time Sundry Submitted: 05:35

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

ALLISON601FEDERALCOM602HREVISEDPLAT_20250415053501.pdf

Allison_601_Federal_Com_602H_Plan_7_20250415053405.pdf

Allison_601_Federal_Com_602H____Drilling_Technical_Plan___Rev_1_20250415053405.pdf

Received by OCD: 4/15/2025 9:24:30 AM Well Name: ALLISON 601 FEDERAL COM	Well Location: T32N / R07W / SEC 12 / SESW / 36.989814 / -107.521044	County or Parish/State: SAN 67 of JUAN / NM
Well Number: 602H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078483A	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: HILCORP ENERGY COMPANY	

Operator

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

Operator Electronic Signature: AMANDA WALKER

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: Phone: Email address:

BLM Point of Contact

BLM POC Name: DAVE J MANKIEWICZ BLM POC Phone: 5055647761 Disposition: Approved Signature: Dave J Mankiewicz BLM POC Title: AFM-Minerals

Zip:

BLM POC Email Address: DMANKIEW@BLM.GOV

Signed on: APR 15, 2025 05:35 AM

Disposition Date: 04/17/2025

eceived by OCD. 4/15/20	23 7.24.30 AM	Tuge 00 0j				
Form 3160-5 (June 2019)	UNITED STAT DEPARTMENT OF THE BUREAU OF LAND MAN	INTERIOR	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021 5. Lease Serial No.			
Do not use	PRY NOTICES AND REP this form for proposals vell. Use Form 3160-3 (A	6. If Indian, Allottee or Tribe Name				
SUBI	IIT IN TRIPLICATE - Other inst	ructions on page 2	7. If Unit of CA/Agreement, Name and/or No.			
1. Type of Well	Gas Well Other	8. Well Name and No.				
2. Name of Operator			9. API Well No.			
3a. Address		3b. Phone No. <i>(include area code)</i>	10. Field and Pool or Exploratory Area			
4. Location of Well (Footage, S	ec., T.,R.,M., or Survey Description))	11. Country or Parish, State			
1	2. CHECK THE APPROPRIATE I	BOX(ES) TO INDICATE NATURE () DF NOTICE, REPORT OR OTH	IER DATA		
TYPE OF SUBMISSION		TYPE	E OF ACTION			
Notice of Intent	Acidize	Deepen [Hydraulic Fracturing [Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity		
Subsequent Report Casing Repair		New Construction	Recomplete Temporarily Abandon	Other		
Final Abandonment Noti	ce Convert to Injection	n Plug Back	Water Disposal			
the proposal is to deepen din the Bond under which the w completion of the involved	ectionally or recomplete horizonta ork will be perfonned or provide the operations. If the operation results ent Notices must be filed only after	lly, give subsurface locations and me he Bond No. on file with BLM/BIA. I in a multiple completion or recomple	asured and true vertical depths o Required subsequent reports mus tion in a new interval, a Form 31	rk and approximate duration thereof. If f all pertinent markers and zones. Attach st be filed within 30 days following 60-4 must be filed once testing has been he operator has detennined that the site		

14. I hereby certify that the foregoing is true and correct. Name (<i>Printed/Typed</i>)		
	Title	
Signature	Date	
THE SPACE FOR FEDE	RAL OR STATE OF	ICE USE
Approved by		
	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant 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.		
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within		fully to make to any department or agency of the United States

(Instructions on page 2)

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

Additional Information

Location of Well

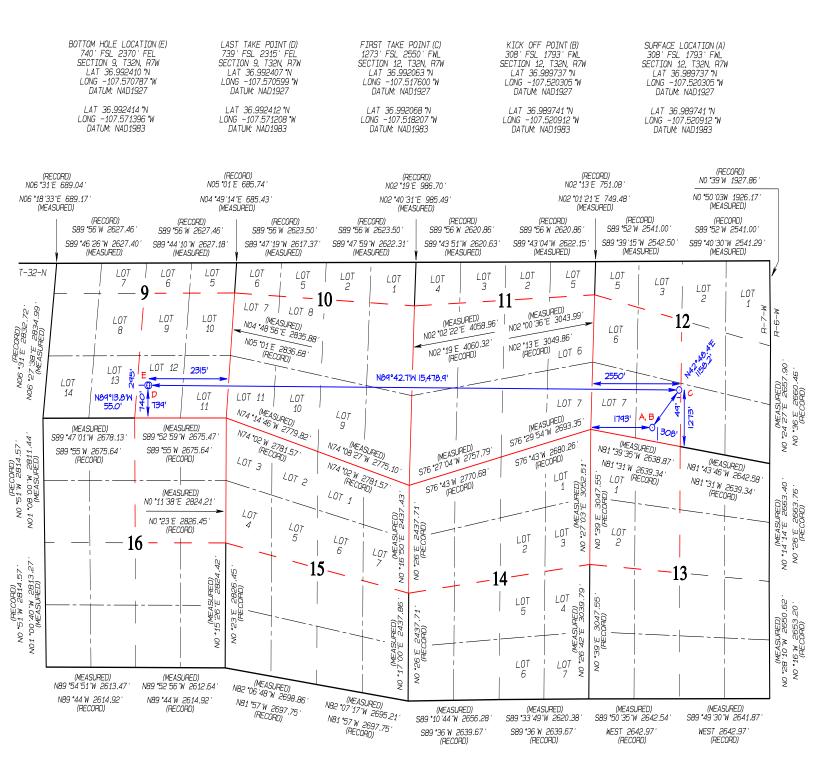
0. SHL: SESW / 329 FSL / 1753 FWL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.989814 / LONG: -107.521044 (TVD: 0 feet, MD: 0 feet) PPP: NENE / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 15 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: LOT 2 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 14 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: SESE / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 10 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: LOT 1 / 0 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 13 / LAT: 36.0 / LONG: -107.0 (TVD: 0 feet, MD: 0 feet) PPP: SWSE / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 11 / LAT: 36.991665 / LONG: -107.54494 (TVD: 7108 feet, MD: 19471 feet) PPP: SESW / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 11 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) PPP: LOT 7 / 979 FSL / 0 FEL / TWSP: 32N / RANGE: 07W / SECTION: 12 / LAT: 36.991699 / LONG: -107.522506 (TVD: 7108 feet, MD: 19471 feet) BHL: LOT 11 / 675 FSL / 236 FWL / TWSP: 32N / RANGE: 07W / SECTION: 10 / LAT: 36.992006 / LONG: -107.562517 (TVD: 7108 feet, MD: 19471 feet)

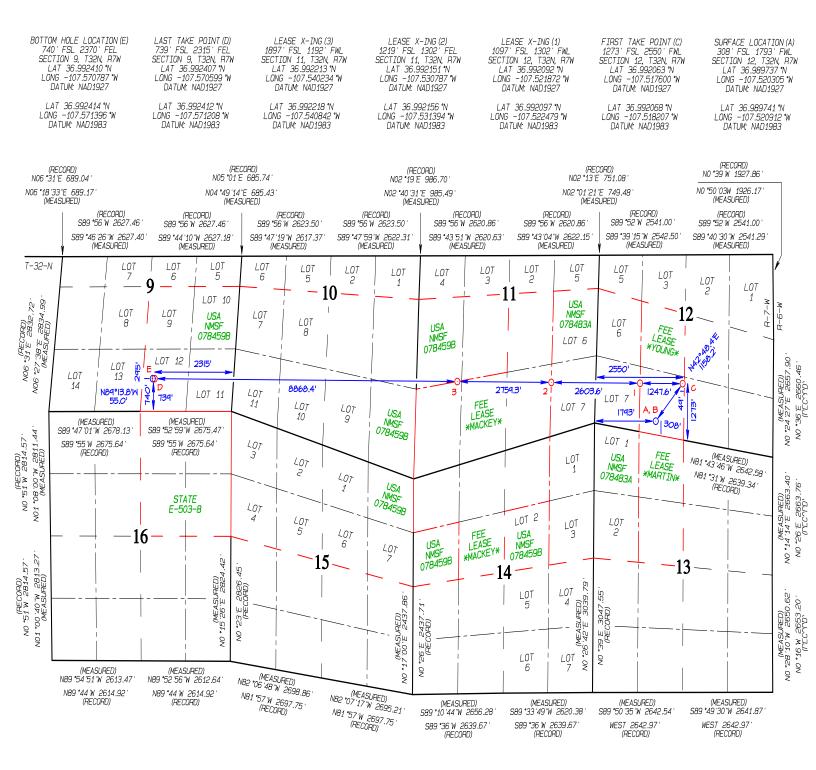
ecei	ved by	OCD: 4/	15/202:	5 9:24:	30 AM								Page	e 71 of s
C-10)2					e of New						Re	vised July	9, 2024
Submit Electronically Via OCD Permitting OIL CONSERVATION DIVISION					lesources	; Department	_		🛛 In:	itial	Submitta	al		
					/TSTON		ittal ⁄pe	Ame	ended	Report				
UIL CONSERVATION DIVISION							1)	he	🗌 As	Drill	.ed			
					WELL	LOCATION	INFOR	MATION						
PI Nur		0.45.00		Pool	Code 972	32		Pool Name		BAS	IN MANC	05		
		045-38	3444			02								
ropert	y Code 337	7188		Prope	erty Name AL	LISON 601	FEDERAL	COM		Well Numbe	er	602H		
GRID	No.	372171		Opera	ator Name H	ILCORP ENER	RGY COMP	PANY		Ground Lev	/el Elevatio	n 65	563 '	
iunface	Owner:	🗆 State	🛛 Fee 🛛] Tribal	🗌 Federal		Mineral O	wner: 🛛 State 🖾 🛛	ee 🗆	Tribal 🗵] Federal			
						Surface L	ocation							
N	Section 12	Township 32N	Range 7W	Lot	Feet from N/S Line 308' SOUTH	Feet from E/W 1 1793′	_ine WEST	Latitude 36.98974	41 °N	Longitude	9 07.5209	12 °W	County SAN	JUAN
			1			Bottom Hole	e Locati	on						
	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W l	_ine	Latitude		Longitude	2		County	
0	9	32N	7W	12	740' SOUTH	2370'	EAST	36.9924	14 °N	-10	07.57139	96 °W	SAN	JUAN
					Penetrated Spacing Unit									
	cated res				Lots 9-12 SS	5	Infill or Defining Well Defining Well API		Overlapping Spacing Unit Consolidation Code					
	2.09 SW/4,		SW/- 7 S12	4, W/2 + E/2	SE/4, Lots 7–11 S10 SE/4, Lots 6–7 S1 NW/4, Lots 1–2 S13	1 Infill 3		Allison 601 Federa Com 603H API: TBD		Yes	🛛 No	Com		
		NE/4	NW/4 NE/4,	NE/4, Lots	NW/4, Lots 1-3 S14 1-7 S15 + NE/4 S16	Order Number:	5			Well Co	setbacks ar ommon Owner	e under ship	🛛 Yes	🗌 No
						Kick Off Po	oint (KC	IP)						
	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W l		Latitude		Longitude			County	
N	12	32N	7W		308' SOUTH	1793 '	WEST	36.98974	41 °N	-10	07.5209	12 °W	SAN	JUAN
				1	-	irst Take F		TP)						
N I	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W l		Latitude		Longitude		7 91.1	County	II. LAN I
N	12	32N	7W		1273' SOUTH	2550 '	WEST	36.99206	og "N	-10	07.51820)/ "W	SAN	JUAN
			-	1	-	.ast Take P	•							
-	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W I		Latitude	1 1 91	Longitude		0.01	County	11 1 4 5 1
0	9	32N	7W	12	739' SOUTH	2315 '	EAST	36.9924	12 IN	-10	07.57120	N. R.	SAN	JUAN

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☑ Horizontal	🗌 Vertical	Directional	Ground Floor Elevation

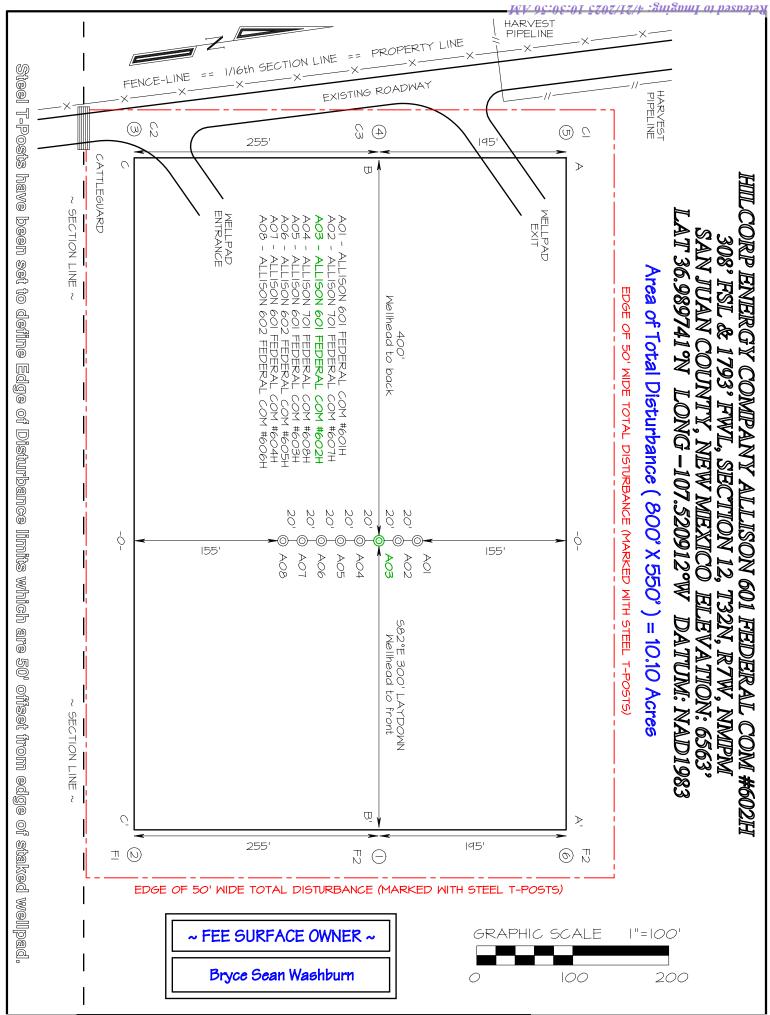
OPERATOR CERTIFICATION	SURVEYOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the 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	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.
interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.	JEON C. EDWARD
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 3/19/2025	H (15269) E 3/18/2025 S 3/18/2025 S 3/18/20 3/18/2025 S 3/18/2025 S 3/18/205 S 3/18/2025 S 3/18/205 S
Amanda Walker Printed Name	Jason C. Edwards
	Signature and Seal of Professional Surveyor
mwalker@hilcorp.com E-mail Address	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. Released to Imaging: $4/21/2025 \ 10:30:56 \ AM$





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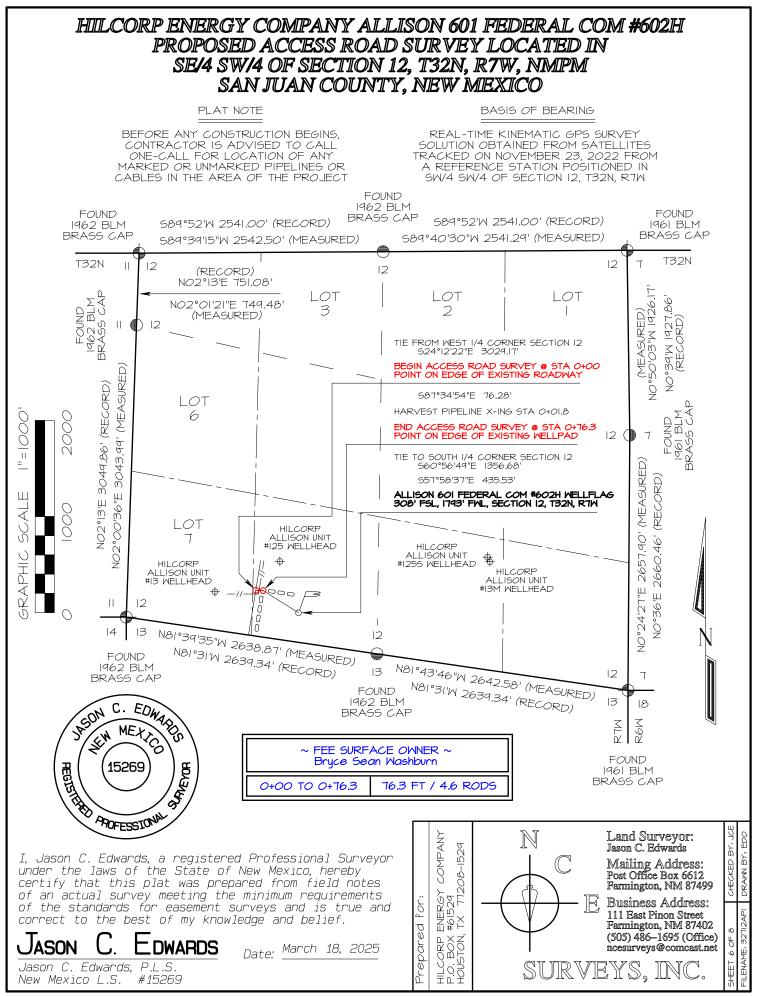
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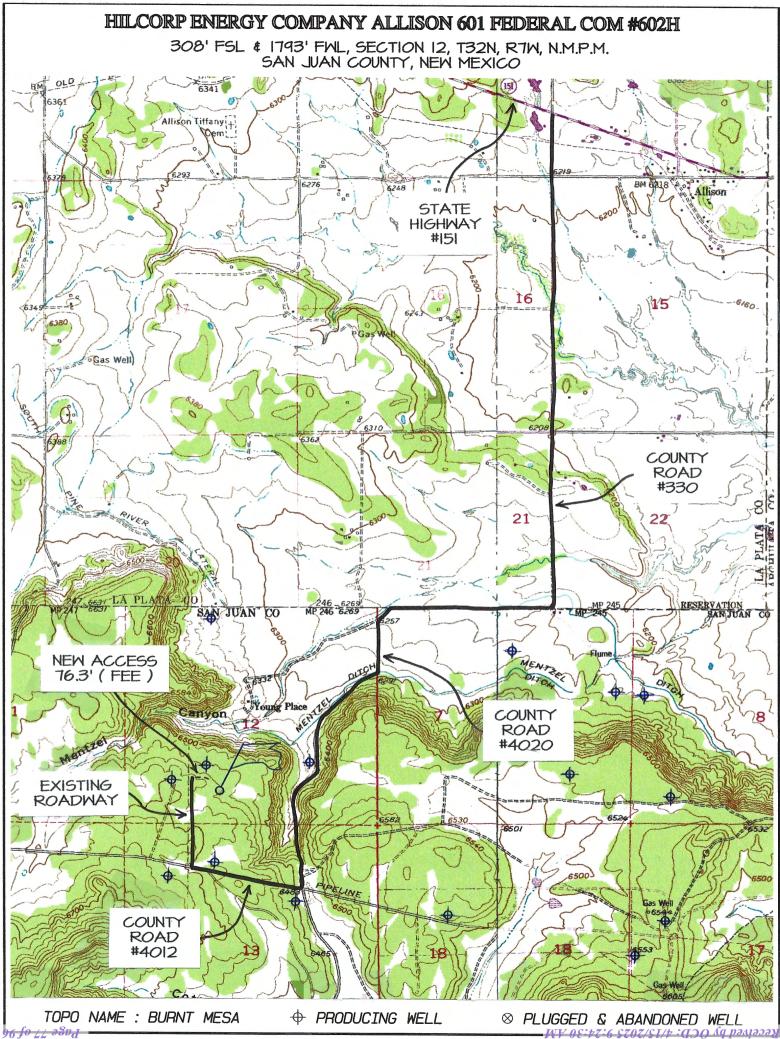
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Directions from Intersection of State Hwy 172 & State Hwy 151 in Ignacio, CO

to Hilcorp Energy Company Allison 601 Federal Com #602H

308' FSL & 1793' FWL, Section 12, T32N, R7W, N.M.P.M., San Juan County, NM

Latitude 36.989741°N Longitude -107.520912°W Datum: NAD1983

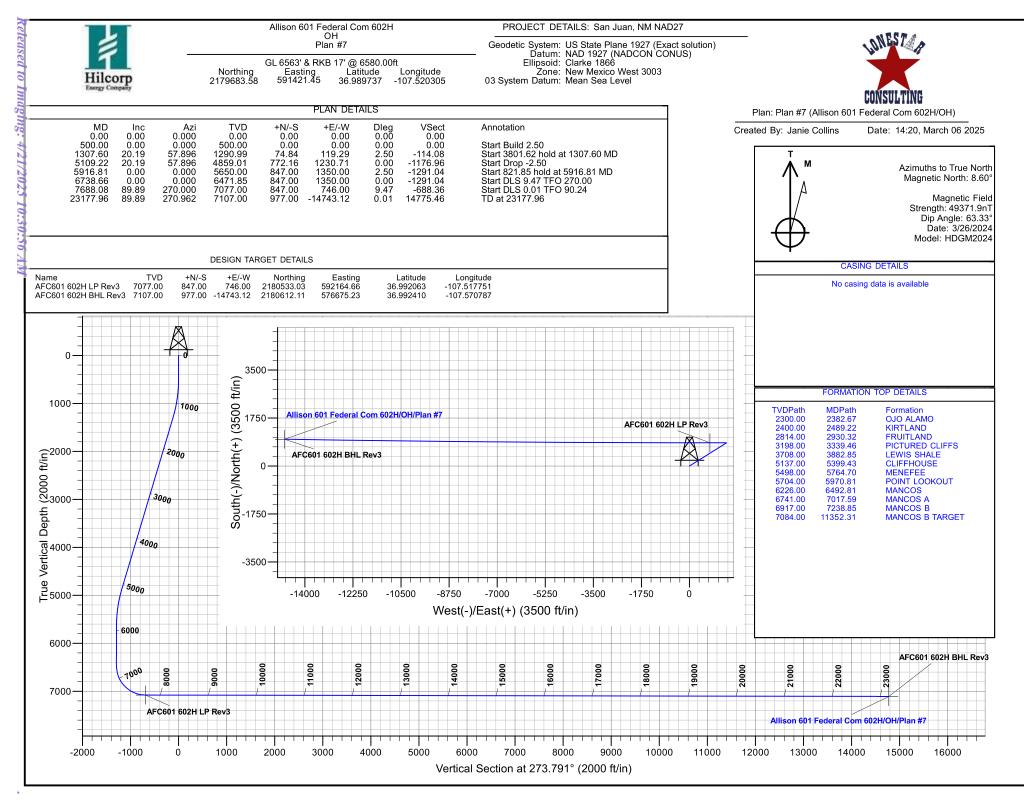
From the intersection of State Hwy 172 & State Hwy 151 in Ignacio, CO, travel Easterly on State Hwy 151 for 12.0 miles to County Road #330:

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

Go Right (Westerly) on County Road #4020 for 1.9 miles to County Road #4012:

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

Go Right (Northerly) exiting County Road #4012 for 0.3 miles to Hilcorp Energy Company Allison 601 Federal Com #602H existing location on right-hand side of existing roadway.



Page 79 of S



Hilcorp Energy - San Juan Basin

San Juan, NM NAD27 Allison Unit 601 / 701 Pad Allison 601 Federal Com 602H - Slot 03

OH

Plan: Plan #7

Standard Planning Report

06 March, 2025





Lonestar Consulting, LLC

Planning Report



Database: Company: Project: Site: Well: Wellbore: Design:	Sar Allis Allis OH	orp Energy Juan, NM son Unit 60 son 601 Fe	, I NAD27)1 / 701 P	ad		TVD Refer MD Refere North Ref	Local Co-ordinate Reference: TVD Reference: MD Reference: North Reference: Survey Calculation Method:			Well Allison 601 Federal Com 602H - Slot 03 GL 6563' & RKB 17' @ 6580.00ft GL 6563' & RKB 17' @ 6580.00ft True Minimum Curvature			
Project	San	San Juan, NM NAD27											
Map System: Geo Datum: Map Zone:	NAD 1	ate Plane 1927 (NAD ⁄lexico Wes	CON COI	uct solution) NUS)		System Dat	um:	N	lean Sea Level				
Site	Allis	on Unit 601	1 / 701 Pa	d									
Site Position: From: Position Uncerta		Northing: Lat/Long Easting: r: 0.00 ft Slot Radius:				722.92 usft 127.46 usft 13.20 in	Latitude: Longitude:			36.989845 -107.520284			
Well	Alliso	on 601 Fed	eral Com	602H - Slot ()3								
Well Position Position Uncerta Grid Convergen			0.00 0.00 0.00 0.19	ft Eas ft We	rthing: sting: Ilhead Elevat	ion:	2,179,683.58 591,421.46	usft Lo	titude: ngitude: ound Level:		36.989737 -107.520305 6,563.00 ft		
Wellbore	OH												
Magnetics	l	Model Nan	ne W2024	Sample	Date	Declina (°)	tion 8.60	-	Angle (°) 63.33	(1	Strength 1T) 71.9000000		
							0.00						
Design	Plan	#7											
Audit Notes: Version:				Phase		PLAN	Tie	On Depth:		0.00			
Vertical Section			Der	th From (TV		+N/-S		:/-W	Di	rection			
	- 			(ft) 0.00	-,	(ft) 0.00	(ft) .00		(°) 73.791			
Plan Survey Too Depth Fro (ft) 1 0	m De	pth To (ft) \$,177.85 F	Survey (N	-		Tool Name MWD+HDGM OWSG MWD	+ HDGM	Remarks					
Plan Sections													
Measured Depth (ft)	Inclination (°)	Azimu (°)		/ertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target		
0.00 500.00 1,307.60 5,109.22 5,916.81 6,738.66	0.0 0.0 20.1 20.1 0.0 0.0	0 (9 57 9 57 0 (0.000 0.000 7.896 7.896 0.000 0.000	0.00 500.00 1,290.99 4,859.01 5,650.00 6,471.85	0.00 0.00 74.84 772.16 847.00 847.00	0.00 0.00 119.29 1,230.71 1,350.00 1,350.00	0.00 0.00 2.50 0.00 2.50 0.00	0.00 0.00 2.50 0.00 -2.50 0.00	0 0.00 0 0.00 0 0.00 0 0.00 0 0.00	0.00 0.00 57.90 0.00 180.00 0.00			
7,688.08 23,177.96	89.8 89.8	9 270	0.000 0.962	7,077.00 7,107.00	847.00 977.00	746.00	9.47 0.01	9.47 0.00	-9.48	270.00	AFC601 602H LP Rev AFC601 602H BHL R		

3/6/2025 1:55:30PM

COMPASS 5000.16 Build 100



Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot 03
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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
500.00 600.00	0.00	0.000 57.896	500.00	0.00 1.16	0.00 1.85	0.00	0.00	0.00 2.50	0.00 0.00
	2.50		599.97			-1.77	2.50		
700.00	5.00	57.896	699.75	4.63	7.39	-7.06	2.50	2.50	0.00
800.00	7.50	57.896	799.14	10.42	16.61	-15.88	2.50	2.50	0.00
900.00	10.00	57.896	897.97	18.50	29.49	-28.21	2.50	2.50	0.00
1,000.00	12.50	57.896	996.04	28.87	46.02	-44.01	2.50	2.50	0.00
1,100.00	15.00	57.896	1,093.17	41.50	66.15	-63.26	2.50	2.50	0.00
1,200.00	17.50	57.896	1,189.17	56.37	89.85	-85.93	2.50	2.50	0.00
1,300.00	20.00	57.896	1,283.85	73.46	117.08	-111.97	2.50	2.50	0.00
1,307.60	20.19	57.896	1,290.99	74.84	119.29	-114.08	2.50	2.50	0.00
1,400.00	20.19	57.896	1,377.71	91.79	146.30	-139.91	0.00	0.00	0.00
1,500.00	20.19	57.896	1,471.57	110.13	175.54	-167.87	0.00	0.00	0.00
1,600.00	20.19	57.896	1,565.42	128.48	204.77	-195.83	0.00	0.00	0.00
1,700.00	20.19	57.896	1,659.28	146.82	234.01	-223.79	0.00	0.00	0.00
1,800.00	20.19	57.896	1,753.13	165.16	263.25	-251.75	0.00	0.00	0.00
1,900.00	20.19	57.896	1,846.99	183.50	292.48	-279.71	0.00	0.00	0.00
2,000.00	20.19	57.896	1,940.84	201.85	321.72	-307.67	0.00	0.00	0.00
2,100.00	20.19	57.896	2,034.70	220.19	350.95	-335.62	0.00	0.00	0.00
2,200.00	20.19	57.896	2,128.56	238.53	380.19	-363.58	0.00	0.00	0.00
2,300.00	20.19	57.896	2,222.41	256.88	409.42	-391.54	0.00	0.00	0.00
2,400.00	20.19	57.896	2,316.27	275.22	438.66	-419.50	0.00	0.00	0.00
2,500.00	20.19	57.896	2,410.12	293.56	467.89	-447.46	0.00	0.00	0.00
2,600.00	20.19	57.896	2,503.98	311.90	497.13	-475.42	0.00	0.00	0.00
2,700.00	20.19	57.896	2,597.83	330.25	526.36	-503.38	0.00	0.00	0.00
2,800.00	20.19	57.896	2,691.69	348.59	555.60	-531.33	0.00	0.00	0.00
2,900.00	20.19	57.896	2,785.54	366.93	584.84	-559.29	0.00	0.00	0.00
3,000.00	20.19	57.896	2,879.40	385.27	614.07	-587.25	0.00	0.00	0.00
3,100.00	20.19	57.896	2,973.25	403.62	643.31	-615.21	0.00	0.00	0.00
3,200.00	20.19	57.896	3,067.11	421.96	672.54	-643.17	0.00	0.00	0.00
3,300.00	20.19	57.896	3,160.97	440.30	701.78	-671.13	0.00	0.00	0.00
3,400.00	20.19	57.896	3,254.82	458.64	731.01	-699.09	0.00	0.00	0.00
3,500.00	20.19	57.896	3,348.68	476.99	760.25	-727.04	0.00	0.00	0.00
3,600.00	20.19	57.896	3,442.53	495.33	789.48	-755.00	0.00	0.00	0.00
3,700.00	20.19	57.896	3,536.39	513.67	818.72	-782.96	0.00	0.00	0.00
3,800.00	20.19	57.896	3,630.24	532.01	847.96	-810.92	0.00	0.00	0.00
3,900.00	20.19	57.896	3,724.10	550.36	877.19	-838.88	0.00	0.00	0.00
4,000.00	20.19	57.896	3,817.95	568.70	906.43	-866.84	0.00	0.00	0.00
4,100.00	20.19	57.896	3,911.81	587.04	935.66	-894.80	0.00	0.00	0.00
4,200.00	20.19	57.896	4,005.66	605.38	964.90	-922.76	0.00	0.00	0.00
4,300.00	20.19	57.896	4,099.52	623.73	994.13	-950.71	0.00	0.00	0.00
4,400.00	20.19	57.896	4,193.37	642.07	1,023.37	-978.67	0.00	0.00	0.00
4,500.00	20.19	57.896	4,287.23	660.41	1,052.60	-1,006.63	0.00	0.00	0.00
4,600.00	20.19	57.896	4,381.09	678.75	1,081.84	-1,034.59	0.00	0.00	0.00
4,700.00	20.19	57.896	4,474.94	697.10	1,111.07	-1,062.55	0.00	0.00	0.00
4,800.00	20.19	57.896	4,568.80	715.44	1,140.31	-1,090.51	0.00	0.00	0.00
4,900.00	20.19	57.896	4,662.65	733.78	1,169.55	-1,118.47	0.00	0.00	0.00
5,000.00	20.19	57.896	4,756.51	752.12	1,198.78	-1,146.42	0.00	0.00	0.00
5,100.00	20.19	57.896	4,850.36	770.47	1,228.02	-1,174.38	0.00	0.00	0.00
5,109.22	20.19	57.896	4,859.01	772.16	1,230.71	-1,176.96	0.00	0.00	0.00

3/6/2025 1:55:30PM

Page 3

COMPASS 5000.16 Build 100

.



Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot 03
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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	17.92	57.896	4,944.82	787.91	1,255.82	-1,200.97	2.50	-2.50	0.00
5,300.00	15.42	57.896	5,040.61	803.15	1,280.11	-1,224.20	2.50	-2.50	0.00
5,400.00	12.92	57.896	5,137.56	816.16	1,300.85	-1,244.03	2.50	-2.50	0.00
5,500.00	10.42	57.896	5,235.48	826.91	1,317.98	-1,260.42	2.50	-2.50	0.00
5,600.00	7.92	57.896	5,334.19	835.38	1,331.48	-1,273.33	2.50	-2.50	0.00
5,700.00	5.42	57.896	5,433.51	841.55	1,341.32	-1,273.33	2.50	-2.50	0.00
5,700.00	0.42	57.690	5,455.51	041.55	1,341.32	-1,202.74	2.50	-2.50	0.00
5,800.00	2.92	57.896	5,533.24	845.42	1,347.48	-1,288.63	2.50	-2.50	0.00
5,900.00	0.42	57.896	5,633.19	846.97	1,349.95	-1,290.99	2.50	-2.50	0.00
5,916.81	0.00	0.000	5,650.00	847.00	1,350.00	-1,291.04	2.50	-2.50	0.00
6,000.00	0.00	0.000	5,733.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,100.00	0.00	0.000	5,833.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
0 000 00	0.00	0.000	F 022 40	0.47.00	4 250 00	4 004 04	0.00	0.00	0.00
6,200.00	0.00	0.000	5,933.19	847.00	1,350.00	-1,291.04	0.00	0.00	
6,300.00	0.00	0.000	6,033.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,400.00	0.00	0.000	6,133.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,500.00	0.00	0.000	6,233.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,600.00	0.00	0.000	6,333.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,700.00	0.00	0.000	6,433.19	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,738.66	0.00	0.000	6,471.85	847.00	1,350.00	-1,291.04	0.00	0.00	0.00
6,800.00	5.81	270.000	6,533.08	847.00	1,346.89	-1,287.94	9.47	9.47	0.00
6,900.00	15.28	270.000	6,631.28	847.00	1,328.62	-1,269.71	9.47	9.47	0.00
7,000.00	24.74	270.000	6,725.14	847.00	1,294.44	-1,235.60	9.47	9.47	0.00
					,				
7,100.00	34.21	270.000	6,812.09	847.00	1,245.29	-1,186.56	9.47	9.47	0.00
7,200.00	43.68	270.000	6,889.78	847.00	1,182.50	-1,123.91	9.47	9.47	0.00
7,300.00	53.15	270.000	6,956.08	847.00	1,107.79	-1,049.36	9.47	9.47	0.00
7,400.00	62.62	270.000	7,009.19	847.00	1,023.19	-964.95	9.47	9.47	0.00
7,500.00	72.08	270.000	7,047.65	847.00	931.01	-872.97	9.47	9.47	0.00
7,600.00	81.55	270.000	7,070.43	847.00	833.76	-775.93	9.47	9.47	0.00
7,688.08	89.89	270.000	7,077.00	847.00	746.00	-688.36	9.47	9.47	0.00
7,700.00	89.89	270.000	7,077.02	847.00	734.08	-676.47	0.01	0.00	0.00
7,800.00	89.89	270.007	7,077.21	847.01	634.08	-576.69	0.01	0.00	0.01
7,900.00	89.89	270.013	7,077.40	847.02	534.08	-476.91	0.01	0.00	0.01
7,900.00	09.09	270.015			554.00				
8,000.00	89.89	270.019	7,077.59	847.05	434.08	-377.12	0.01	0.00	0.01
8,100.00	89.89	270.026	7,077.78	847.09	334.08	-277.34	0.01	0.00	0.01
8,200.00	89.89	270.032	7,077.97	847.14	234.08	-177.55	0.01	0.00	0.01
8,300.00	89.89	270.038	7,078.16	847.20	134.08	-77.77	0.01	0.00	0.01
8,400.00	89.89	270.044	7,078.36	847.27	34.08	22.02	0.01	0.00	0.01
8,500.00	89.89	270.050	7,078.55	847.36	-65.92	121.80	0.01	0.00	0.01
8,600.00	89.89	270.050	7.078.74	847.45	-165.92	221.59	0.01	0.00	0.01
8,700.00	89.89	270.063	7,078.93	847.45 847.55	-265.92	321.39	0.01	0.00	0.01
8,800.00	89.89	270.063	7,078.93	847.55 847.67	-265.92 -365.92	421.17	0.01	0.00	0.01
8,900.00	89.89	270.009	7,079.12	847.80	-465.92	520.95	0.01	0.00	0.01
9,000.00	89.89	270.081	7,079.50	847.93	-565.92	620.74	0.01	0.00	0.01
9,100.00	89.89	270.088	7,079.69	848.08	-665.92	720.54	0.01	0.00	0.01
9,200.00	89.89	270.094	7,079.88	848.24	-765.91	820.33	0.01	0.00	0.01
9,300.00	89.89	270.100	7,080.07	848.41	-865.91	920.12	0.01	0.00	0.01
9,400.00	89.89	270.106	7,080.26	848.59	-965.91	1,019.91	0.01	0.00	0.01
9,500.00	89.89	270.112	7,080.45	848.78	-1,065.91	1,119.70	0.01	0.00	0.01
9,600.00	89.89	270.119	7,080.65	848.98	-1,165.91	1,219.50	0.01	0.00	0.01
9,700.00	89.89	270.125	7,080.84	849.19	-1,265.91	1,319.29	0.01	0.00	0.01
9,800.00	89.89	270.131	7,081.03	849.42	-1,365.91	1,419.09	0.01	0.00	0.01
9,900.00	89.89	270.137	7,081.22	849.65	-1,465.91	1,518.89	0.01	0.00	0.01
10,000.00	89.89	270.144	7,081.41	849.90	-1,565.91	1,618.68	0.01	0.00	0.01
10,100.00	89.89	270.150	7,081.60	850.15	-1,665.91	1,718.48	0.01	0.00	0.01
10,200.00	89.89	270.156	7,081.79	850.42	-1,765.91	1,818.28	0.01	0.00	0.01

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COMPASS 5000.16 Build 100

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Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot 03
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 602H	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	89.89	270.162	7,081.98	850.70	-1,865.91	1,918.08	0.01	0.00	0.01
10,400.00	89.89	270.162	7,082.18	850.98	-1,965.91	2,017.88	0.01	0.00	0.01
10,500.00	89.89	270.175	7,082.37	851.28	-2,065.91	2,117.68	0.01	0.00	0.01
10,600.00	89.89	270.181	7,082.56	851.59	-2,165.91	2,217.48	0.01	0.00	0.01
10,700.00	89.89	270.187	7,082.75	851.92	-2,265.91	2,317.28	0.01	0.00	0.01
10,800.00	89.89	270.193	7,082.94	852.25	-2,365.91	2,417.08	0.01	0.00	0.01
10,900.00	89.89	270.199	7,083.13	852.59	-2,465.91	2,516.89	0.01	0.00	0.01
11,000.00	89.89	270.206	7,083.32	852.94	-2,565.91	2,616.69	0.01	0.00	0.01
11,100.00	89.89	270.212	7,083.52	853.31	-2,665.90	2,716.49	0.01	0.00	0.01
11,200.00	89.89	270.212	7,083.71	853.68	-2,765.90	2,816.30	0.01	0.00	0.01
					,				
11,300.00	89.89	270.224	7,083.90	854.07	-2,865.90	2,916.10	0.01	0.00	0.01
11,400.00	89.89	270.230	7,084.09	854.47	-2,965.90	3,015.91	0.01	0.00	0.01
11,500.00	89.89	270.237	7,084.28	854.87	-3,065.90	3,115.72	0.01	0.00	0.01
11,600.00	89.89	270.243	7,084.48	855.29	-3,165.90	3,215.53	0.01	0.00	0.01
11,700.00	89.89	270.249	7,084.67	855.72	-3,265.90	3,315.33	0.01	0.00	0.01
11,800.00	89.89	270.255	7,084.86	856.16	-3,365.90	3,415.14	0.01	0.00	0.01
11,900.00	89.89	270.261	7,085.05	856.61	-3,465.90	3,514.95	0.01	0.00	0.01
12,000.00	89.89	270.268	7,085.24	857.07	-3,565.89	3,614.76	0.01	0.00	0.01
12,000.00	89.89	270.208	7,085.24	857.55	-3,665.89	3,714.70	0.01	0.00	0.01
						,			
12,200.00	89.89	270.280	7,085.63	858.03	-3,765.89	3,814.39	0.01	0.00	0.01
12,300.00 12,400.00	89.89 89.89	270.286 270.293	7,085.82 7,086.01	858.52 859.03	-3,865.89 -3,965.89	3,914.20 4,014.01	0.01 0.01	0.00 0.00	0.01 0.01
						,			
12,500.00	89.89	270.299	7,086.20	859.55	-4,065.89	4,113.83	0.01	0.00	0.01
12,600.00	89.89	270.305	7,086.40	860.07	-4,165.89	4,213.64	0.01	0.00	0.01
12,700.00	89.89	270.311	7,086.59	860.61	-4,265.88	4,313.45	0.01	0.00	0.01
12,800.00	89.89	270.317	7,086.78	861.16	-4,365.88	4,413.27	0.01	0.00	0.01
12,900.00	89.89	270.324	7,086.97	861.72	-4,465.88	4,513.09	0.01	0.00	0.01
13,000.00	89.89	270.330	7,087.17	862.29	-4,565.88	4,612.90	0.01	0.00	0.01
13,100.00	89.89	270.336	7,087.36	862.87	-4,665.88	4,712.72	0.01	0.00	0.01
13,200.00	89.89	270.342	7,087.55	863.46	-4,765.88	4,812.54	0.01	0.00	0.01
13,300.00	89.89	270.348	7,087.75	864.06	-4,865.87	4,912.36	0.01	0.00	0.01
13,400.00	89.89	270.355	7,087.94	864.68	-4,965.87	5,012.18	0.01	0.00	0.01
13,500.00	89.89	270.361	7,088.13	865.30	-5,065.87	5,112.00	0.01	0.00	0.01
13,600.00	89.89	270.367	7,088.32	865.94	-5,165.87	5,211.82	0.01	0.00	0.01
13,700.00	89.89	270.373	7,088.52	866.58	-5,265.86	5,311.64	0.01	0.00	0.01
13,800.00	89.89	270.379	7,088.71	867.24	-5,365.86	5,411.46	0.01	0.00	0.01
13,900.00	89.89	270.386	7,088.90	867.91	-5,465.86	5,511.29	0.01	0.00	0.01
14,000.00	89.89	270.392	7,089.10	868.59	-5,565.86	5,611.11	0.01	0.00	0.01
14,100.00	89.89	270.398	7,089.29	869.28	-5,665.85	5,710.93	0.01	0.00	0.01
14,200.00	89.89	270.404	7,089.48	869.98	-5,765.85	5,810.76	0.01	0.00	0.01
14,300.00	89.89	270.411	7,089.67	870.69	-5,865.85	5,910.58	0.01	0.00	0.01
14,400.00	89.89	270.417	7,089.87	871.41	-5,965.85	6,010.41	0.01	0.00	0.01
14,500.00	89.89	270.423	7,090.06	872.14	-6,065.84	6,110.24	0.01	0.00	0.01
14,500.00	89.89	270.423	7,090.06	872.14 872.89	-6,065.84 -6,165.84	6,110.24 6,210.06	0.01	0.00	0.01
14,700.00	89.89	270.435	7,090.45	873.64	-6,265.84	6,309.89	0.01	0.00	0.01
14,800.00	89.89	270.442	7,090.64	874.40	-6,365.83	6,409.72	0.01	0.00	0.01
14,900.00	89.89	270.448	7,090.83	875.18	-6,465.83	6,509.55	0.01	0.00	0.01
15,000.00	89.89	270.454	7,091.03	875.97	-6,565.83	6,609.38	0.01	0.00	0.01
15,100.00	89.89	270.460	7,091.22	876.77	-6,665.83	6,709.21	0.01	0.00	0.01
15,200.00	89.89	270.466	7,091.42	877.57	-6,765.82	6,809.04	0.01	0.00	0.01
15,300.00	89.89	270.473	7,091.61	878.39	-6,865.82	6,908.87	0.01	0.00	0.01
15,400.00	89.89	270.479	7,091.80	879.22	-6,965.81	7,008.71	0.01	0.00	0.01
15,500.00	89.89	270.485	7,092.00	880.07	-7,065.81	7,108.54	0.01	0.00	0.01
15,600.00	89.89	270.483	7,092.10	880.92	-7,165.81	7,108.34	0.01	0.00	0.01

3/6/2025 1:55:30PM

COMPASS 5000.16 Build 100

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Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot 03
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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	89.89	270.497	7,092.38	881.78	-7,265.80	7,308.21	0.01	0.00	0.01
15,800.00	89.89	270.504	7,092.58	882.65	-7,365.80	7,408.04	0.01	0.00	0.01
15,900.00	89.89	270.510	7,092.77	883.54	-7,465.79	7,507.88	0.01	0.00	0.01
16,000.00	89.89	270.516	7,092.97	884.43	-7,565.79	7,607.71	0.01	0.00	0.01
16,100.00	89.89	270.522	7,093.16	885.34	-7,665.79	7,707.55	0.01	0.00	0.01
16,200.00	89.89	270.528	7,093.35	886.26	-7,765.78	7,807.39	0.01	0.00	0.01
16,300.00	89.89	270.535	7,093.55	887.18	-7,865.78	7,907.23	0.01	0.00	0.01
16,400.00	89.89	270.541	7,093.74	888.12	-7,965.77	8,007.07	0.01	0.00	0.01
16,500.00	89.89	270.547	7,093.94	889.07	-8,065.77	8,106.90	0.01	0.00	0.01
16,600.00	89.89	270.553	7,094.13	890.03	-8,165.76	8,206.74	0.01	0.00	0.01
16,700.00	89.89	270.560	7,094.32	891.00	-8,265.76	8,306.58	0.01	0.00	0.01
16,800.00	89.89	270.566	7,094.52	891.99	-8,365.75	8,406.43	0.01	0.00	0.01
16,900.00	89.89	270.572	7,094.71	892.98	-8,465.75	8,506.27	0.01	0.00	0.01
17,000.00	89.89	270.578	7,094.91	893.98	-8,565.74	8,606.11	0.01	0.00	0.01
17,100.00	89.89	270.584	7,095.10	895.00	-8,665.74	8,705.95	0.01	0.00	0.01
17,200.00	89.89	270.591	7,095.30	896.02	-8,765.73	8,805.80	0.01	0.00	0.01
17,300.00	89.89	270.597	7,095.49	897.06	-8,865.73	8,905.64	0.01	0.00	0.01
17,400.00	89.89	270.603	7,095.68	898.11	-8,965.72	9,005.48	0.01	0.00	0.01
17,500.00	89.89	270.609	7,095.88	899.16	-9,065.72	9,105.33	0.01	0.00	0.01
17,600.00	89.89	270.615	7,096.07	900.23	-9,165.71	9,205.18	0.01	0.00	0.01
17,700.00	89.89	270.622	7,096.27	901.31	-9,265.70	9,305.02	0.01	0.00	0.01
17,800.00	89.89	270.628	7,096.46	902.40	-9,365.70	9,404.87	0.01	0.00	0.01
17,900.00	89.89	270.634	7,096.66	903.50	-9,465.69	9,504.72	0.01	0.00	0.01
18,000.00	89.89	270.640	7,096.85	904.61	-9,565.68	9,604.57	0.01	0.00	0.01
18,100.00	89.89	270.646	7,097.05	905.74	-9,665.68	9,704.41	0.01	0.00	0.01
18,200.00	89.89	270.653	7,097.24	906.87	-9,765.67	9,804.26	0.01	0.00	0.01
18,300.00	89.89	270.659	7,097.44	908.02	-9,865.66	9,904.11	0.01	0.00	0.01
18,400.00	89.89	270.665	7,097.63	909.17	-9,965.66	10,003.97	0.01	0.00	0.01
18,500.00	89.89	270.671	7,097.83	910.34	-10,065.65	10,103.82	0.01	0.00	0.01
18,600.00	89.89	270.677	7,098.02	911.51	-10,165.64	10,203.67	0.01	0.00	0.01
18,700.00	89.89	270.684	7,098.22	912.70	-10,265.64	10,303.52	0.01	0.00	0.01
18,800.00	89.89	270.690	7,098.41	913.90	-10,365.63	10,403.37	0.01	0.00	0.01
18,900.00	89.89	270.696	7,098.61	915.11	-10,465.62	10,503.23	0.01	0.00	0.01
19,000.00	89.89	270.702	7,098.80	916.33	-10,565.61	10,603.08	0.01	0.00	0.01
19,100.00	89.89	270.709	7,099.00	917.56	-10,665.61	10,702.94	0.01	0.00	0.01
19,200.00	89.89	270.715	7,099.19	918.80	-10,765.60	10,802.79	0.01	0.00	0.01
19,300.00	89.89	270.721	7,099.39	920.06	-10,865.59	10,902.65	0.01	0.00	0.01
19,400.00	89.89	270.727	7,099.58	921.32	-10,965.58	11,002.50	0.01	0.00	0.01
19,500.00	89.89	270.733	7,099.78	922.59	-11,065.57	11,102.36	0.01	0.00	0.01
19,600.00	89.89	270.740	7,099.98	923.88	-11,165.57	11,202.22	0.01	0.00	0.01
19,700.00	89.89	270.746	7,100.17	925.18	-11,265.56	11,302.08	0.01	0.00	0.01
19,800.00	89.89	270.752	7,100.37	926.48	-11,365.55	11,401.94	0.01	0.00	0.01
19,900.00	89.89	270.758	7,100.56	927.80	-11,465.54	11,501.80	0.01	0.00	0.01
20,000.00	89.89	270.764	7,100.76	929.13	-11,565.53	11,601.66	0.01	0.00	0.01
20,100.00	89.89	270.771	7,100.95	930.47	-11,665.52	11,701.52	0.01	0.00	0.01
20,200.00	89.89	270.777	7,101.15	931.82	-11,765.51	11,801.38	0.01	0.00	0.01
20,300.00	89.89	270.783	7,101.35	933.18	-11,865.50	11,901.24	0.01	0.00	0.01
20,400.00	89.89	270.789	7,101.54	934.55	-11,965.49	12,001.10	0.01	0.00	0.01
20,500.00	89.89	270.795	7,101.74	935.94	-12,065.48	12,100.96	0.01	0.00	0.01
20,600.00	89.89	270.802	7,101.93	937.33	-12,165.47	12,200.83	0.01	0.00	0.01
20,700.00	89.89	270.808	7,102.13	938.73	-12,265.46	12,300.69	0.01	0.00	0.01
20,800.00	89.89	270.814	7,102.33	940.15	-12,365.45	12,400.56	0.01	0.00	0.01
20,900.00	89.89	270.820	7,102.52	941.58	-12,465.44	12,500.42	0.01	0.00	0.01

3/6/2025 1:55:30PM

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COMPASS 5000.16 Build 100



Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot 03
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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	89.89	270.833	7,102.91	944.46	-12,665.42	12,700.15	0.01	0.00	0.01
21,200.00	89.89	270.839	7,103.11	945.92	-12,765.41	12,800.02	0.01	0.00	0.01
21,300.00	89.89	270.845	7,103.31	947.39	-12,865.40	12,899.89	0.01	0.00	0.01
21,400.00	89.89	270.851	7,103.50	948.87	-12,965.39	12,999.76	0.01	0.00	0.01
21,500.00	89.89	270.858	7,103.70	950.36	-13,065.38	13,099.62	0.01	0.00	0.01
21,600.00	89.89	270.864	7,103.90	951.86	-13,165.37	13,199.49	0.01	0.00	0.01
21,700.00	89.89	270.870	7,104.09	953.38	-13,265.35	13,299.36	0.01	0.00	0.01
21,800.00	89.89	270.876	7,104.29	954.90	-13,365.34	13,399.23	0.01	0.00	0.01
21,900.00	89.89	270.882	7,104.48	956.43	-13,465.33	13,499.10	0.01	0.00	0.01
22,000.00	89.89	270.889	7,104.68	957.98	-13,565.32	13,598.97	0.01	0.00	0.01
22,100.00	89.89	270.895	7,104.88	959.54	-13,665.31	13,698.85	0.01	0.00	0.01
22,200.00	89.89	270.901	7,105.07	961.10	-13,765.29	13,798.72	0.01	0.00	0.01
22,300.00	89.89	270.907	7,105.27	962.68	-13,865.28	13,898.59	0.01	0.00	0.01
22,400.00	89.89	270.913	7,105.47	964.27	-13,965.27	13,998.46	0.01	0.00	0.01
22,500.00	89.89	270.920	7,105.66	965.87	-14,065.25	14,098.34	0.01	0.00	0.01
22,600.00	89.89	270.926	7,105.86	967.48	-14,165.24	14,198.21	0.01	0.00	0.01
22,700.00	89.89	270.932	7,106.06	969.10	-14,265.23	14,298.09	0.01	0.00	0.01
22,800.00	89.89	270.938	7,106.26	970.73	-14,365.21	14,397.96	0.01	0.00	0.01
22,900.00	89.89	270.944	7,106.45	972.38	-14,465.20	14,497.84	0.01	0.00	0.01
23,000.00	89.89	270.951	7,106.65	974.03	-14,565.19	14,597.72	0.01	0.00	0.01
23,100.00	89.89	270.957	7,106.85	975.69	-14,665.17	14,697.59	0.01	0.00	0.01
23,177.96	89.89	270.962	7.107.00	977.00	-14,743,12	14.775.46	0.01	0.00	0.01

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
AFC601 602H LP Rev3 - plan hits target cent - Point	0.00 er	0.000	7,077.00	847.00	746.00	2,180,533.03	592,164.67	36.992064	-107.517751
AFC601 602H BHL Rev: - plan hits target cent - Point	0.00 er	0.000	7,107.00	977.00	-14,743.12	2,180,612.11	576,675.23	36.992410	-107.570787



Lonestar Consulting, LLC

Planning Report



Database:	edm	Local Co-ordinate Reference:	Well Allison 601 Federal Com 602H - Slot 03
Company:	Hilcorp Energy - San Juan Basin	TVD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Project:	San Juan, NM NAD27	MD Reference:	GL 6563' & RKB 17' @ 6580.00ft
Site:	Allison Unit 601 / 701 Pad	North Reference:	True
Well:	Allison 601 Federal Com 602H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan #7		

Formations

I	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	2,382.67	2,300.00	OJO ALAMO		0.00	0.000	
	2,489.22	2,400.00	KIRTLAND		0.00	0.000	
	2,930.32	2,814.00	FRUITLAND		0.00	0.000	
	3,339.46	3,198.00	PICTURED CLIFFS		0.00	0.000	
	3,882.85	3,708.00	LEWIS SHALE		0.00	0.000	
	5,399.43	5,137.00	CLIFFHOUSE		0.00	0.000	
	5,764.70	5,498.00	MENEFEE		0.00	0.000	
	5,970.81	5,704.00	POINT LOOKOUT		0.00	0.000	
	6,492.81	6,226.00	MANCOS		0.00	0.000	
	7,017.59	6,741.00	MANCOS A		0.00	0.000	
	7,238.85	6,917.00	MANCOS B		0.00	0.000	
	11,352.31	7,084.00	MANCOS B TARGET		0.00	0.000	



Technical Drilling Plan (Rev. 1)

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

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

1. Location

Date:	March 12, 2025	Pool:	Basin Mancos
Well Name:	Allison 601 Federal Com 602H	Ground Elevation (ft. MSL):	6,563'
Surface Hole Location:	36.989737° N, 107.520305° W	Total Measured Depth (ft.)	23,178'
Bottom Hole Location:	36.992410° N, 107.570787° 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

Allison 601 Federal Com 602H



3. Pressure Control Equipment

A. BOP Equipment

See Appendix A for BOP equipment and choke manifold diagram.

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

B. BOP Pressure Testing

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

C. BOP Function Testing

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

D. Casing Pressure Testing

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



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'	6,593'/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'	23,178'/7,107'	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	3.4				
Production	2.9	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:
 - o Burst: 1.15
 - Collapse: 1.15
 - Tensile: 1.50
- **Casing Safety Factor Calculations:**

Casing Burst Rating(psi)

 $Casing Burst Safety Factor = \frac{Casing Line (production of the constraints)}{Maximum Mud Weight (ppg) \times TVD(ft) \times 0.052}$

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

Tensile Rating of Casing String (lbs)

 $Tensile Safety Factor = \frac{1}{Measured Depth of Casing(ft) \times Casing Weight \frac{lb}{ft} \times DrillingFluid Bouyancy Factor}$

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.				
Interne diete Casing	1 centralizer per joint in shoe track.				
Intermediate Casing	1 centralizer every 3 rd joint to surface.				
Production Casing	Centralizers determined by hole conditions from TD to top of cement.				

6. Proposed Cement Program:

	Proposed Cement Design							
Interval	Depth	Lead/Tail	Volume	Sacks	Excess	Slurry	Density	Planned
	(ft. MD)		(ft³)		(%)		(ppg)	тос
Surface	350'	Lead	486 ft ³	352	100%	Class G Cement Yield: 1.38 ft ³ /sk	14.6	Surface
		Slurry Additives	s: CaCl (1%), Ce	llo Flake (0.	25 lb/sk), CD-	2 (0.2%)		
	6,593'	Lead	1,947 ft ³	380	25%	ASTM Type IL Yield: 5.12 ft ³ /sk	9.5	Surface
Intermediate		Slurry Additives: FL-24 (0.5%), FL-66 (0.5%), IntegraGuard GW-86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), Int (0.25 lb/sk), LW-5E (50.0%), R-3 (0.4%), S-8 Silica Flour (35.0%), XCem-311 (0.3%)						Seal POLI
Internetiate		Tail	623 ft ³	290	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%)						
		Lead	576 ft ³	368	25%	ASTM Type IL Yield: 1.57 ft ³ /sk	12.0	5,000'
Draduction	22 170'	Slurry Additives KCl (3.0%), R-3	•			86 (0.2%), IntegraSeal PHENO (2.0 lb/sk), -311 (0.3%)	IntegraSeal Po	li (0.25 lb/sk),
Production	23,178'	Tail	4,595 ft ³	3,105	25%	Class G Yield: 1.48 ft ³ /sk	14.0	7,200'
			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).

San Juan County, NM



7. Drilling Fluids Program

A. Proposed Drilling Fluids Program:

Proposed Drilling Fluids Program						
Interval	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' – 6,593'	
Production	Oil Base Mud	10.0 - 12.0	6 – 8	70/30 – 75/25	6,593' – 23,178'	

Drilling Fluids Notes:

- In the 8-1/2" production section, oil base mud will be utilized which will be an invert mud. The base fluid will be diesel. Brine fluid will be CaCl₂ or KCl.
- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- The well will be drilled utilizing a closed-loop circulating system. Drill cuttings for all hole sections will be transported to an approved disposal site.
- Estimated total volume of drill cuttings for disposal: 2,178 bbls (12,229 ft³).

8. Estimated Pressures & Drilling Hazards

A. Estimated Pressures

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

B. Water Flows

• Water flows are possible in the intermediate section. Water flows will be mitigated with increased mud weight.

C. Lost Circulation

• Lost circulation is possible in the intermediate section. Losses will be mitigated by utilizing LCM in the mud system.

D. Hydrogen Sulfide

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

Allison 601 Federal Com 602H



- 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.

Allison 601 Federal Com 602H



12. Completion

A. Pressure Testing

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

B. Stimulation

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

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

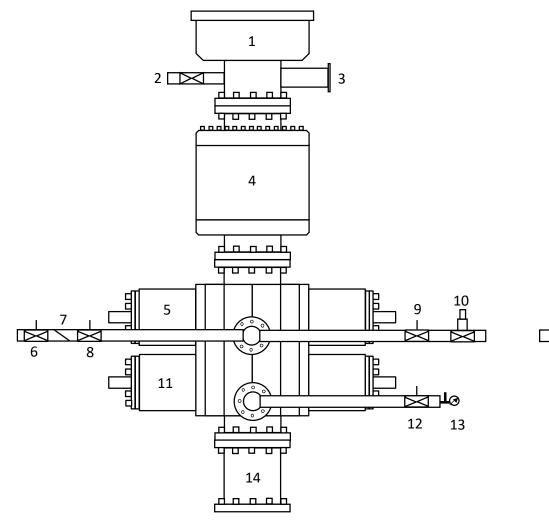
San Juan County, NM

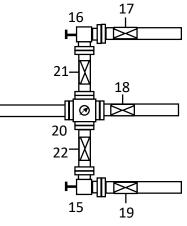
Allison 601 Federal Com 602H



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

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

Operat	or:	OGRID:
	HILCORP ENERGY COMPANY	372171
	1111 Travis Street	Action Number:
	Houston, TX 77002	452113
		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

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Action 452113