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

Online Phone Directory
<a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

Form C-101 August 1, 2011

Permit 394956

#### APPLICATION FOR PERMIT TO DRILL. RE-ENTER. DEEPEN. PLUGBACK, OR ADD A ZONE

74 1 10 (11 0 11 1 1 1 1 1 1 1 1 1 1 1 1 1													
1. Operator Name	1. Operator Name and Address 2. OGRID Number												
HILCO	ORP ENERGY CO		372171										
1111	1111 Travis Street 3. API Number												
Houston, TX 77002 30-045-38469													
4. Property Code 5. Property Name 6. Well No.													
31889	90		001M										
				_	N								
				7.3	Surface Location								
UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County				
Α	16	30N	11W	Α	1029	N	314	E	San Juan				

8. Proposed Bottom Hole Location Township E/W Line UL - Lot Section Lot Idn N/S Line Feet From County Range Feet From 16 30N 11W 737 Ν 708 San Juan

9. Pool Information

BLANCO-MESAVERDE (PRORATED GAS)	72319
BASIN DAKOTA (PRORATED GAS)	71599

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	13. Cable/Rotary 14. Lease Type				
New Well	GAS		State	5755			
16. Multiple	17. Proposed Depth	18. Formation	19. Contractor	20. Spud Date			
Υ	6917	Dakota Formation		1/5/2026			
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water			

☑ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	12.25	9.625	32.3	320	145	0
Int1	8.75	7	23	4210	467	0
Prod	6.25	4.5	11.6	6917	184	3710

#### Casing/Cement Program: Additional Comments

22. Pr	oposed Blowo	ut Prevention	Program
--------	--------------	---------------	---------

Appular 250 2000 2M	Ī	Туре	Working Pressure	Test Pressure	Manufacturer		
Alliulai 250 Suu		Annular	250	3000	3M		

knowledge and be I hereby certify tha or recompletion of	lief. It no additives containing PFAS che this well.	true and complete to the best of my emicals will be added to the completion NMAC 🗵 and/or 19.15.14.9 (B) NMAC		OIL CONSERVATION	ON DIVISION			
Printed Name:	Electronically filed by Cheryl Wes	ston	Approved By:	Jeffrey Harrison				
Title:			Title:	Petroleum Specialist III				
Email Address:	cweston@hilcorp.com		Approved Date:	9/15/2025 Expiration Date: 9/15/2027				
Date:	9/15/2025	Phone: 505-564-0779	Conditions of Approval Attached					

C - 102Submit Electronically Via OCD Permitting

## State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

	Revised July 9, 2024
0 1 111 7	☑ Initial Submittal
Submittal Type	☐ Amended Report
. , , , ,	☐ As Drilled

	WELL LUCATION INFORMATION												
API Nu 30-		88469		Pool	Code 723	19		Pool Name		BLANCO MESAV	ERDE		
Propert	cy Code 318890	)		Prop	erty Name	GONSALES S	STATE CC	)M		Well Number	1M		
OGRID	No.	372171		Open	ator Name H	ILCORP ENEF	RGY COMF	755 '					
Surface	Owner:	☐ State	⊠ Fee □	Tribal	☐ Federal		Mineral Ov	vner: ⊠ State □ Fee		Tribal □ Federal			
						Surface L	ocation.						
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W L	_ine	Latitude		Longitude		County	
A 16 30N 11W 1029' NORTH 314' E							EAST	36.816580	°N	-107.98854	45 °W	SAN JUAN	
	Bottom Hole Location												
UL	Section	Township	_	Lot	Feet from N/S Line	Feet from E/W L		Latitude		Longitude		County	
A	16	30N	11W		737' NORTH	708'	EAST	36.817392	°N	-107.98982	29 °W	SAN JUAN	
Dedicated Acres Penetrated Spacing Unit Infill or Defining Well API Overlapping Spacing Unit Consolidation Code													
320.00													
Section 16, 130N, R11W													
Order Numbers Well setbacks are under Common Ownership: Yes No													
						Kick Off Po	int (KO	P)					
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W L	ine	Latitude		Longitude		County	
						ingt Toke F		TD)					
UL	Cti	Tanaabia	D		Feet from N/S Line	irst Take F				T		Country	
UL	Section	Township	Range	Lot	reet from N/S Line	Feet from E/W L	.ine	Latitude		Longitude		County	
						.ast Take Po	oint (Ll	TP)					
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W L	ine	Latitude		Longitude		County	
		<u> </u>			1								
Unitize	d Area or	Area of Un	iform Intere	est	Spacing Unit Type	izontal 🗆	Vertical	. 🛛 Directional	1	Ground Floor Elevat 5755'	ion		
			PERATO!	R CE	RTIFICATION			SURVI	EY0i	R CERTIFICA	TION		

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

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

# Cherylene Weston

8/7/2025

Cherylene Weston, Operations/Regulatory Tech-Sr.

Printed Name

cweston@hilcorp.com

E-mail Address

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



JASON LDWARDS

Signature and Seal of Professional Surveyor

Certificate Number

15269

Date of Survey

JULY 14, 2025

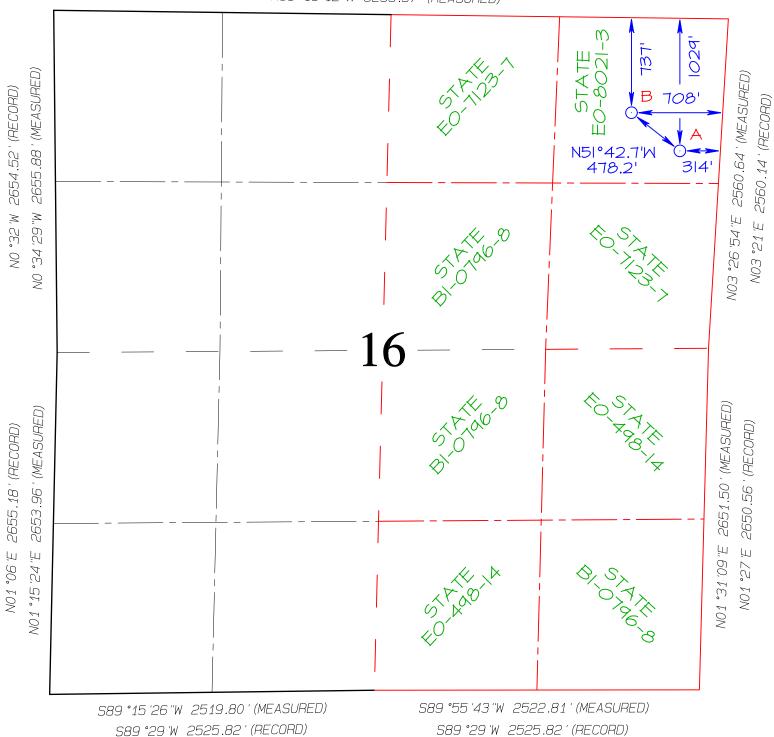
BOTTOM HOLE LOCATION(B) 737' FNL 708' FEL LAT 36.817388°N LONG -107.989206°W DATUM: NAD1927

> LAT 36.817392°N LONG -107.989829°W DATUM: NAD1983

SURFACE LOCATION (A) 1029' FNL 314' FEL LAT 36.816576N LONG -107.987922°W DATUM: NAD1927

LAT 36.816580°N LONG -107.988545°W DATUM: NAD1983

N89 °21 W 5239.08 (RECORD) N89 °16 '12 "W 5235.57 (MEASURED)



Released to Imaging: 9/15/2025 3:47:06 PM

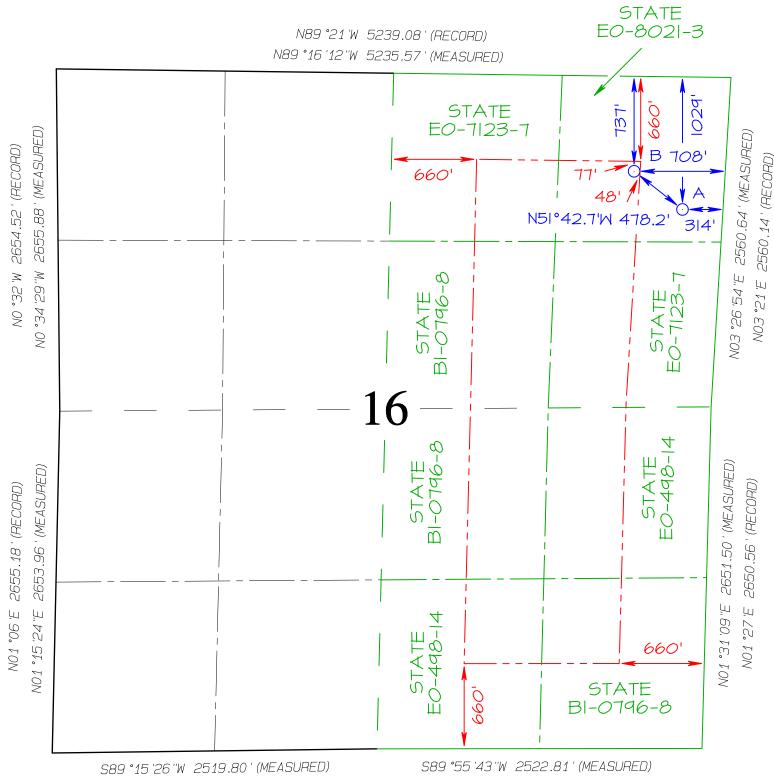
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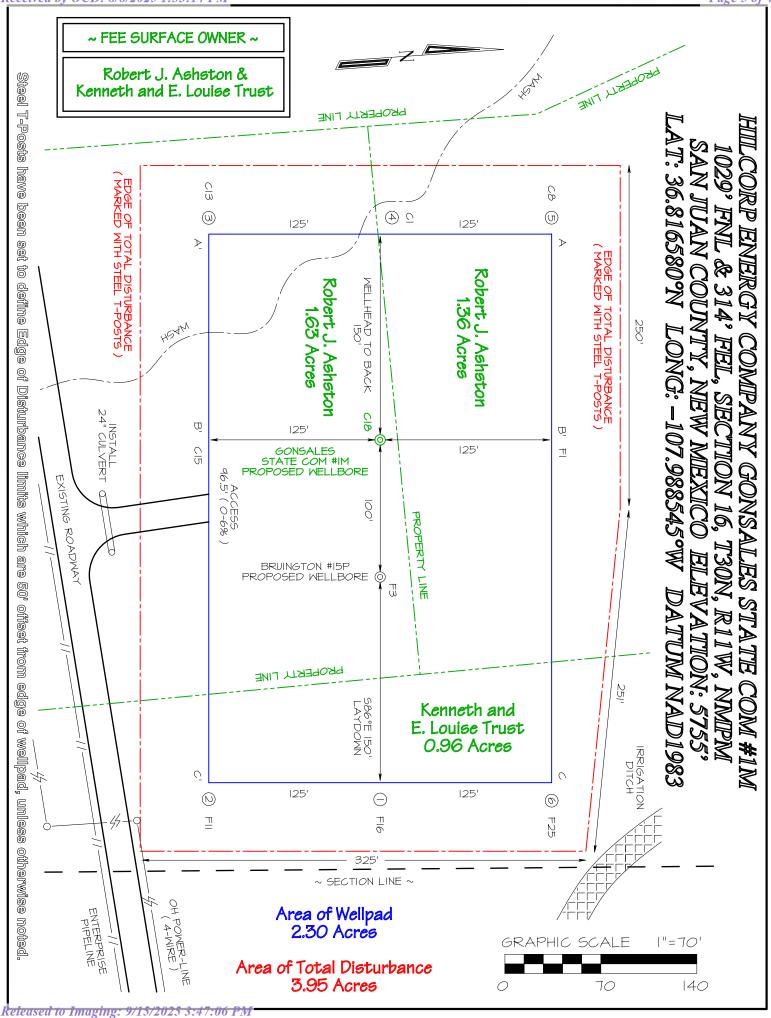
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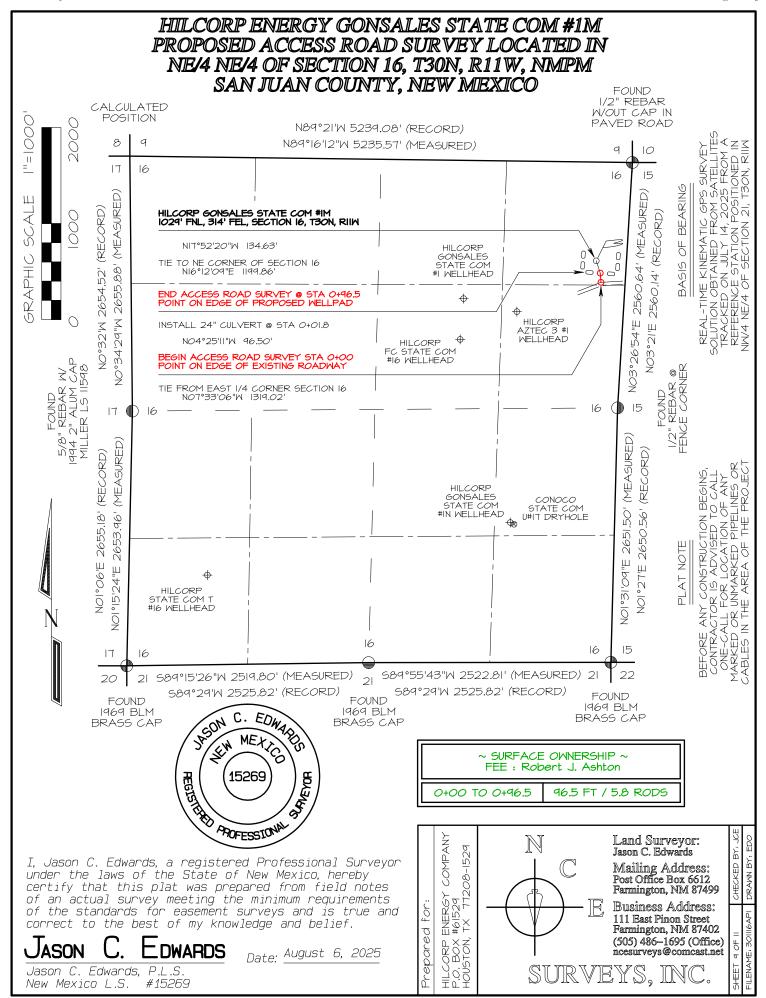
S89 °29 'W 2525.82' (RECORD)

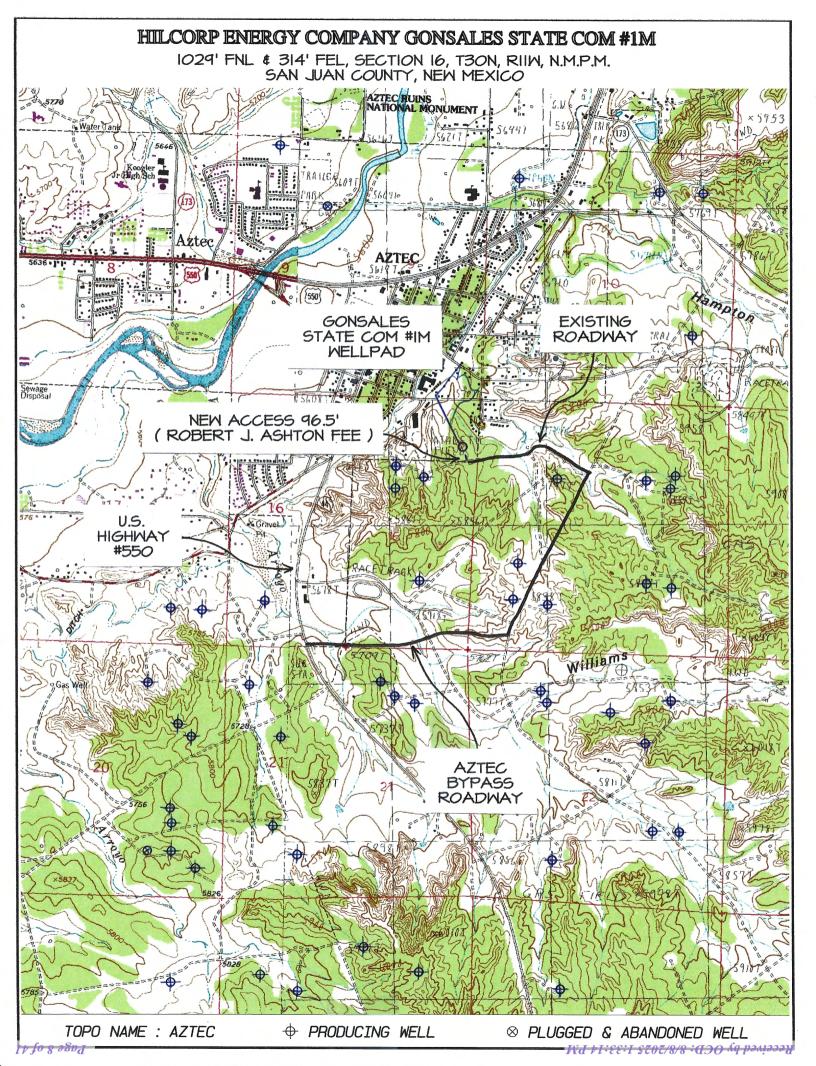


S89 °29 W 2525.82 ' (RECORD)



EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.	5735	5745	5755'	C/L	5755'	5765'	5775'	B-B	C/L	5745'	5755'	5765'	A-A	HORIZONTAL SCALE I"=40' C/L VERTICAL SCALI	HIILCORP ENERGY COMPANY GONSALES STATE COM #1 1029° FNL & 314° FEL, SECTION 16, T30N, R11W, NMPM SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5755°
JTILITIES OR PIPELINES. NMARKED UNDERGROUND DAYS PRIOR TO CONSTRUCTION.		· · · · · · · · · · · · · · · · · · ·	/											VERTICAL SCALE I"=30'	ES STATE COM #1M ON, R11W, NMPM LEVATION: 5755°





#### <u>Directions from the Intersection of State Hwy 516 & State Hwy 550</u>

#### in Aztec, NM to Hilcorp Gonsales State Com #1M

#### 1029' FNL & 314' FEL, Section 16, T30N, R11W, N.M.P.M., San Juan County, NM

Latitude: 36.816580°N Longitude: -107.988545°W Datum: NAD1983

From the intersection of State Hwy 516 & State Hwy 550 in Aztec, NM, travel Southerly on State Hwy 550 for 1.5 miles to Mile Marker 158.5 to Aztec Bypass Roadway;

Go Left (Easterly) exiting US Hwy 550 onto Aztec Bypass Roadway for 0.8 miles to fork in roadway;

Go Left (North-easterly) exiting Aztec Bypass Roadway for 0.7 miles to fork in roadway;

Go Left (North-westerly) for 0.5 miles to new access on right-hand side of existing roadway which continues for 96.5' to Hilcorp Gonsales State Com #1M staked location.

C - 102Submit Electronically Via OCD Permitting

## State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION

	Revised July 9, 2024
0 1 11 1	
Submittal Type	☐ Amended Report
. , , 50	☐ As Drilled

#### WELL LOCATION INFORMATION

					7122	LOUATION	1 1111 0111	17 1 1011					
API NU		-38469	)	Pool	Code 7159	99		Pool Name		BASIN DAKOTA			
	ty Code 318890	)		Prop	erty Name	GONSALES	STATE CC	M		Well Number 1M			
OGRID	No.	372171		Oper	ator Name H	ILCORP ENE	RGY COMP	PANY		Ground Level Elevatio	on 57	755 '	
Surfac	e Owner:	☐ State	⊠ Fee □	Tribal	☐ Federal		Mineral Ov	ner: ⊠ State □ Fee	ПΤ	「ribal □ Federal			
						Surface i	Location						
UL A					Feet from E/W 314'	Line EAST	Latitude 36.816580	°N	Longitude -107.98854	45 °W	County SAN JUAN		
Bottom Hole Location													
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W	Line	Latitude		Longitude		County	
А	16 30N 11W 737 NORTH				708 '	EAST	36.817392	°N	-107.98982	29 °W	SAN JUAN		
Dedica	ted Acres		Per	etrated	Spacing Unit	Infill or De	efining Well	Defining Well API	Over:	lapping Spacing Unit	Consoli	dation Code	
320.00 E/2 - Section 16, T30N, R11W						Infill		30-045-09520		Yes 🗓 No		С	
Order Numbers Well setbacks are under Common Ownership: Yes No													
						Kick Off P	oint (KO	P)					
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W	Line	Latitude		Longitude		County	
					F.	irst Take i	Point (F	TP)					
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W	Line	Latitude		Longitude		County	
					L	.ast Take F	Point (L1	TP)				1	
UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W	Line	Latitude		Longitude		County	
	1				1	l		1		l		1	
Unitize	ed Area or	Area of Ur	iform Inter	est	Spacing Unit Type	izontal 🗆	] Vertical	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	1	Ground Floor Elevat 5755'	ion		
		$\cap$	PFRATO	R CF	RTIFICATION			SI IDV/	ΕΥΛΙ	R CERTIFICAT	T TON		
I here	eby certif knowledge				ned herein is true and compl is a vertical or directional	ete to the best well, that this	I h fie:	ereby certify that the ld notes of actual surv	well I	location shown on th	is plat	was plotted from vision, and that	

ur my кноwledge and pelief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

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# Cherylene Weston

Cherylene Weston, Operations/Regulatory Tech-Sr.

Printed Name

cweston@hilcorp.com

E-mail Address

the same is true and correct to the best of my belief.



JASON **L**DWARDS

Signature and Seal of Professional Surveyor

Certificate Number

15269

Date of Survey

JULY 14, 2025

8/7/2025

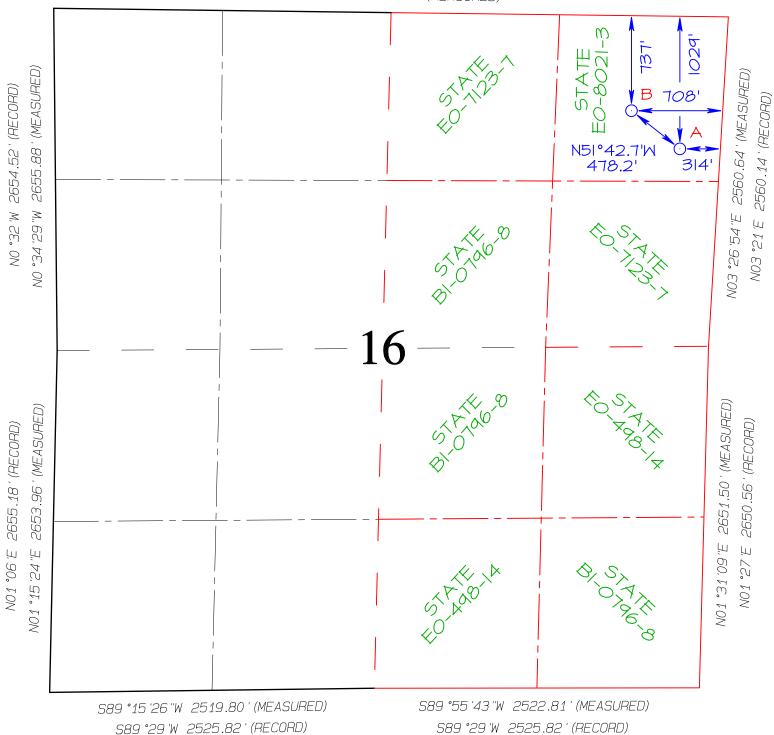
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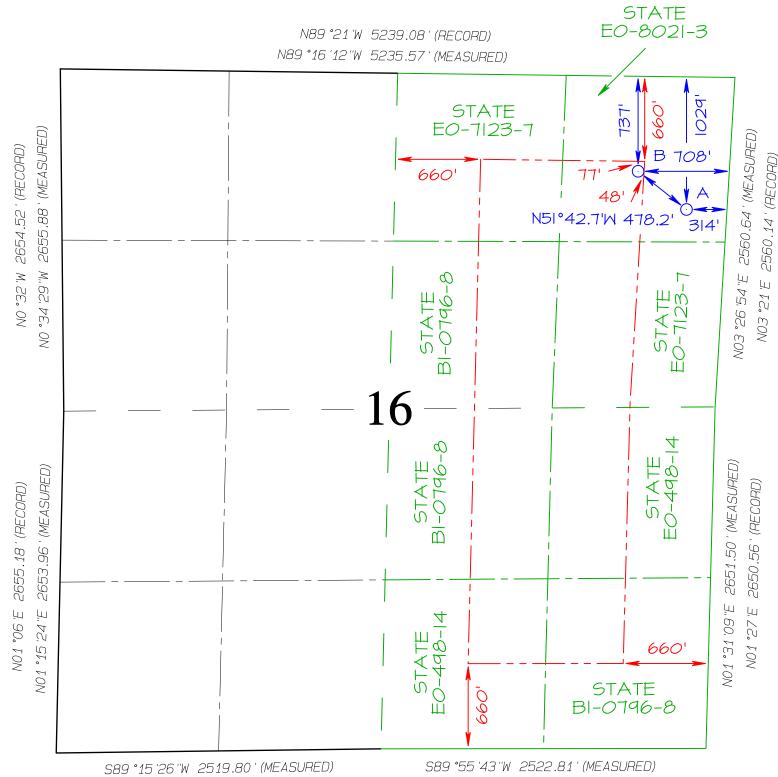
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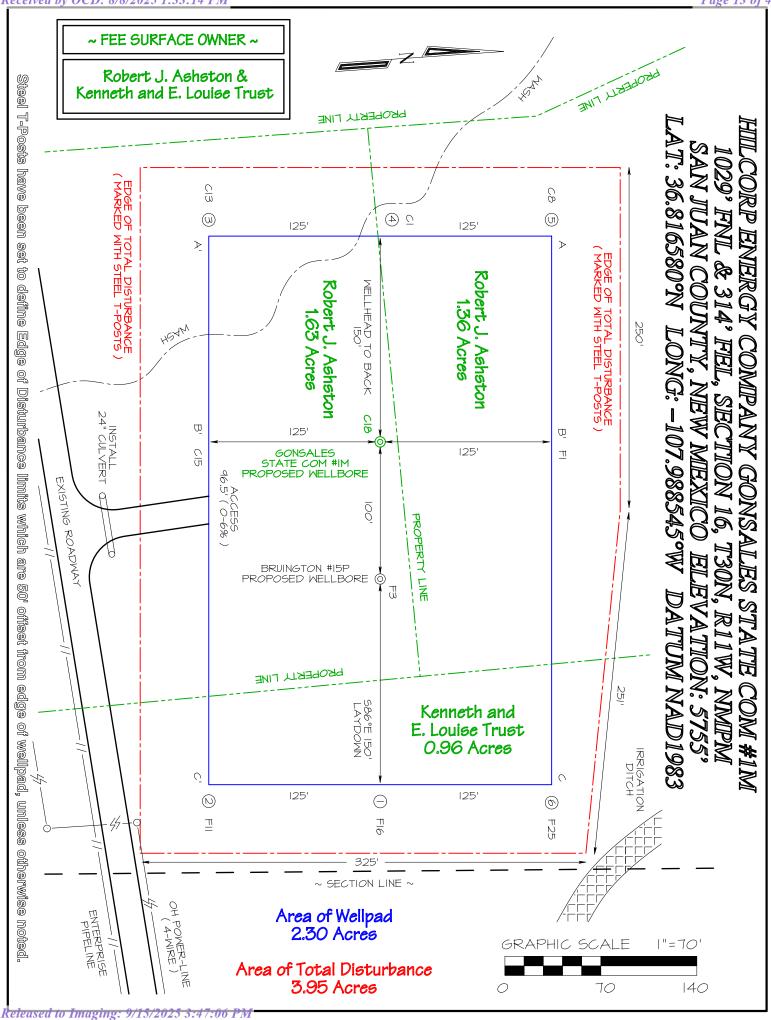
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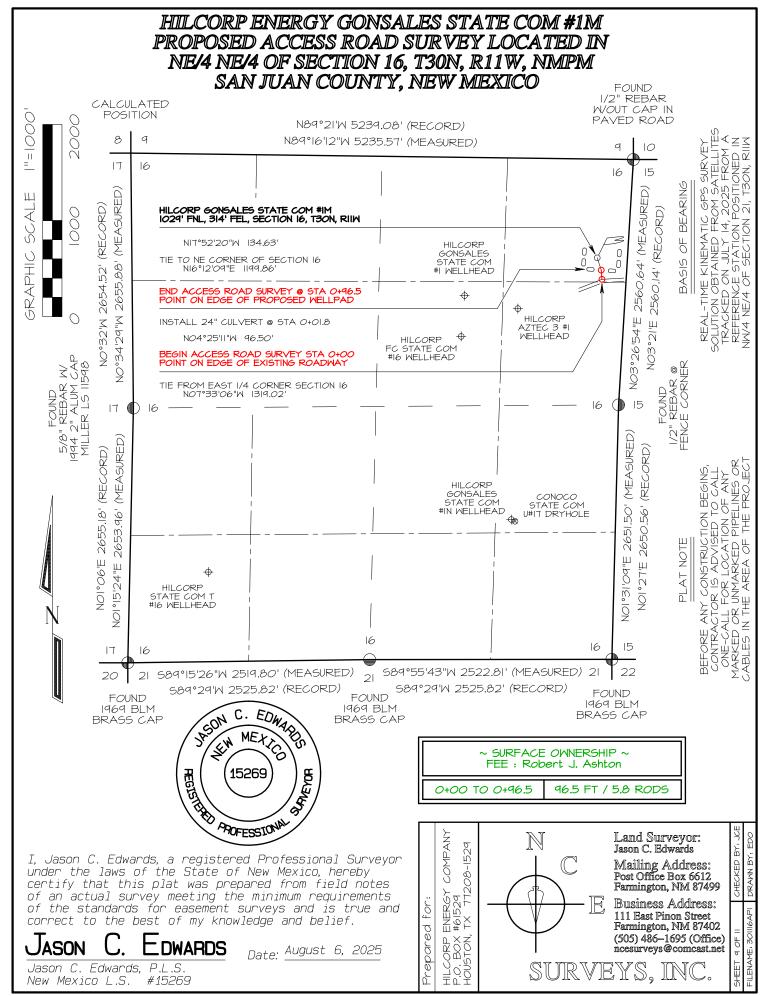
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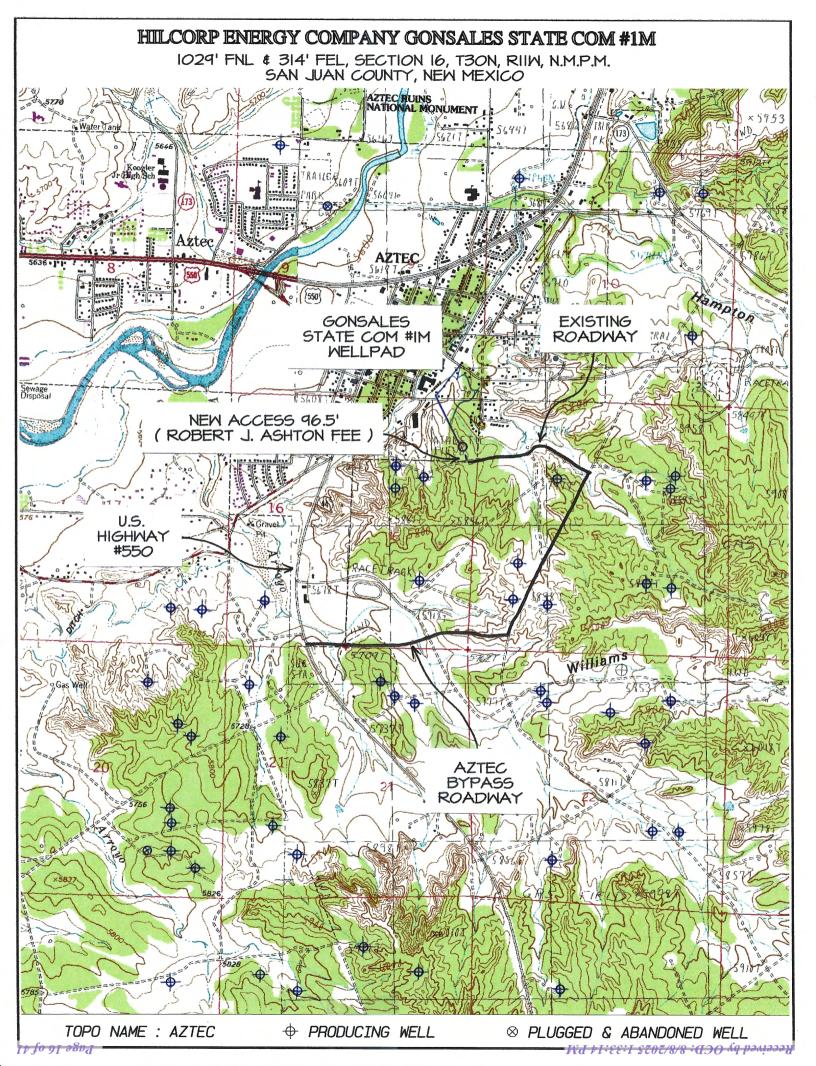


S89 °29 W 2525.82 ' (RECORD)



	5735	5745	5755	C-C		5755	5765	5775	B-B <sub>-</sub>		5745'	5755	5765	A-A		
EDW CONTR. UTILITIES OR															HORIZ	HIIL COR 1029° SAN J
/ARDS SURVEYING, INC ACTOR SHOULD CONTA PIPELINES ON WELLPA		~	· · · · · · · · · · · · · · · · · · ·												HORIZONTAL SCALE	HIILCORP ENERGY COMPANY GONSAI 1029° FNIL & 314° FEIL, SECTION 16, T. SAN JUAN COUNTY, NEW MEXICO I
., IS NOT LIABLE FOR LO CT ONE-CALL FOR LOC D AND/OR ACCESS RO	. 2	\( \frac{1}{2} \)	\ \ 												"=40'	COMIPAN FIEL, SEC VIY, NEW
)CATION OF UNDERGR ATION OF ANY MARKEI AD AT LEAST TWO WOI		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Q / -		C/L	-			W:	C/L					C/L	Y GONSAI TION 16, 1 MEXICO
EDWARDS SURVEYING, INC. IS NOT LIABLE FOR LOCATION OF UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CONTACT ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED UNDERGROUND UTILITIES OR PIPELINES ON WELLPAD AND/OR ACCESS ROAD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.		·	Q												VERTICAL SCALE	ALES STATE COM #1M 130N, R11W, NMPM ELEVATION: 5755'
															"=30'	M





#### <u>Directions from the Intersection of State Hwy 516 & State Hwy 550</u>

#### in Aztec, NM to Hilcorp Gonsales State Com #1M

#### 1029' FNL & 314' FEL, Section 16, T30N, R11W, N.M.P.M., San Juan County, NM

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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

Form APD Comments

Permit 394956

#### PERMIT COMMENTS

Operator Name and Address:	API Number:
HILCORP ENERGY COMPANY [372171]	30-045-38469
1111 Travis Street	Well:
Houston, TX 77002	GONSALES STATE COM #001M

Created By	Comment	Comment Date
jeffrey.harrison	Out of compliance with Rule 19.15.5.9 Inactive Well List. Resubmit when Rule 19.15.5.9 Compliant.	9/11/2025

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

Form APD Conditions

Permit 394956

#### PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
HILCORP ENERGY COMPANY [372171]	30-045-38469
1111 Travis Street	Well:
Houston, TX 77002	GONSALES STATE COM #001M

OCD Reviewer	Condition
jeffrey.harrison	Prior to production of this well a down hole commingle must be approved.
jeffrey.harrison	Notify the OCD 24 hours prior to casing & cement.
jeffrey.harrison	File As Drilled C-102 and a directional Survey with C-104 completion packet.
jeffrey.harrison	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.
jeffrey.harrison	Cement is required to circulate on both surface and intermediate1 strings of casing.
jeffrey.harrison	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
	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.
jeffrey.harrison	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.

San Juan County, NM

#### Gonsales State Com #1M



## Technical Drilling Plan (Rev. 0)

Hilcorp Energy Company proposes to drill and complete the referenced well targeting the Mesa Verde and Dakota formations.

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

#### 1. Location

Date:	August 8, 2025	Pool:	Mesa Verde / Dakota
Well Name:	Gonsales State Com #1M	Ground Elevation (ft. MSL):	5,755'
Surface Hole Location:	36.816576° N, 107.987922° W	Total Depth (ft. TMD/TVD)	6,917' / 6,882'
Bottom Hole Location:	36.817388° N, 107.989206° 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 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	745'	Water (fresh/useable)
Kirtland	873'	None
Fruitland Coal	1,587'	Gas, Water, depleted
Pictured Cliffs	2,183'	Gas, depleted
Lewis Shale	2,330'	None
Chacra	3,215'	None, Gas
Cliff House	3,849'	Gas, Water, possible depletion
Menefee	3,975'	Gas, possible water & depletion
Point Lookout	4,499'	Gas, likely depletion
Mancos	4,836'	Gas, possible condensate
Gallup	5,747'	Gas, possible condensate
Juana Lopez	6,165'	None, Gas
Greenhorn	6,491'	None, Gas
Graneros	6,546'	None, Gas
Two Wells	6,603'	Gas
Paugate	6,680'	Gas, possible depletion
Cubero	6,720'	Gas, possible depletion
Encinal Canyon	6,761'	Gas, Water
Burro Canyon	6,832'	Likely water, Gas possible

#### Gonsales State Com #1M



#### 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 3M standards.
- All equipment will have 3M 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 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 3,000 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

- For all casing pressure testing, a test unit with a chart recorder will be utilized.
- 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.

#### Gonsales State Com #1M



#### 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	12-1/4"	9-5/8"-32.3#-H40 (or equiv.)-LTC/BTC	0'	320′/320′	1,370 psi	2,270 psi	254 klbs			
Intermediate	8-3/4"	7"-23#-J55 (or equiv.)- LTC/BTC	0'	4,210′/4,175′	3,270 psi	4,360 psi	366 klbs			
Production	6-1/4"	4-1/2"-11.6#-J55 (or equiv.)-LTC/BTC	0'	6,917′/6,882′	4,960 psi	5,350 psi	184 klbs			

Proposed Casing Design Safety Factors									
Casing String	Burst Design SF	Collapse Design SF	Joint Tensile Design SF	Connection Tensile Design SF					
Surface	15.2	11.6	40.9	28.5					
Intermediate	2.1	2.0	4.4	5.2					
Production	1.5	1.7	2.7	3.3					

#### B. Casing Design Parameters & Calculations:

- Designed for full wellbore evacuation.
- Mud Weights used for calculations:
  - o Surface = 9.0 ppg
  - o Intermediate = 9.5 ppg
  - o Production = 10.0 ppg
- Minimum Acceptable Safety Factors:

o Burst: 1.15 o Collapse: 1.15 o Tensile: 1.50

Casing Safety Factor Calculations:

$$\textit{Casing Burst Safety Factor} = \frac{\textit{Casing Burst Rating(psi)}}{\textit{Maximum Mud Weight (ppg)} \times \textit{TVD(ft)} \times 0.052}$$
 
$$\textit{Casing Collapse Safety Factor} = \textit{Hydrostatic of Mud Weight in Annulus(psi)} - \left[ \textit{TVD of Casing Shoe (ft)} \times 0.10 \frac{\textit{psi}}{\textit{ft}} \right]$$
 
$$\textit{Tensile Rating of Casing String (lbs)}$$

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

#### **Production Casing Notes:**

- Production casing will be run from surface to TD.
- The 6-1/4" production hole section will be drilled 50' into the Burro Canyon formation and exact TD will be determined onsite by the mud logger.

San Juan County, NM

#### Gonsales State Com #1M



#### 5. Proposed Centralizer Program:

Proposed Centralizer Program						
Casing String	Centralizers & Placement					
Surface Casing	1 centralizer per joint on bottom 3 joints.					
	1 centralizer per joint in shoe track.					
Intermediate Casing	1 centralizer every 3 <sup>rd</sup> joint from float collar to base of Ojo Alamo.					
intermediate casing	1 centralizer per joint from base of Ojo Alamo to the top of the Ojo Alamo.					
	1 centralizer every 3 <sup>rd</sup> joint from top of Ojo Alamo to surface.					
Production Casing	1 centralizer per joint in shoe track.					
Froduction casing	1 centralizer every other joint for bottom 1,000' of casing.					

#### 6. Proposed Cement Program:

Proposed Cement Design											
Interval	Depth	Lead/Tail	Volume	Sacks	Excess	Slurry	Density	Planned			
	(ft. MD)		(ft <sup>3</sup> )		(%)	-	(ppg)	TOC			
Surface	320′	Lead	200 ft <sup>3</sup>	145	100%	Class G Cement Yield: 1.38 ft <sup>3</sup> /sk	14.6	Surface			
		Slurry Additives	s: CaCl (1%), Ce	llo Flake (0.	25 lb/sk), CD-						
	4,210′				Lead	820 ft <sup>3</sup>	385	50%	ASTM Type IL	12.0	Surface
						Yield: 2.13 ft <sup>3</sup> /sk					
Intermediate		Slurry Additives	s: CaCl <sub>2</sub> (3.0%),	Celloflake (	0.25 lb/sk), LC	M-1 (5.0 lb/sk), FL-52 (0.4%), bentonite (	8.0%), SMS (0.4	·%)			
intermediate		Tail	113 ft <sup>3</sup>	82	50%	ASTM Type IL	14.5	3,710′			
		Tall	11311	02		Yield: 1.38 ft <sup>3</sup> /sk	14.5	3,710			
		Slurry Additives	s: CaCl <sub>2</sub> (1.0%),	Celloflake (	0.25 lb/sk), LC	CM-1 (5.0 lb/sk), FL-52 (0.2%)					
		Lead	403 ft <sup>3</sup>	184	25%	ASTM Type IL	12.5	2 710/			
Production	6,917'	Leau	40311	104	2370	Yield: 2.19 ft <sup>3</sup> /sk	12.5	3,710′			
	0,717	,	Slurry Additives: D-CSE 1 (5.0%), D-MPA 2 (1.2%), D-FP 1 (0.5%), D-R 1 (0.2%), Bentonite (4.0%), Plexfiber (0.25 lb/sx), PhenoSeal (0.25 lb/sx), CelloFlake (0.25 lb/sx)								

#### 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(s) will be placed appropriately.
- 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

#### Gonsales State Com #1M



#### 7. Drilling Fluids Program

#### A. Proposed Drilling Fluids Program:

Proposed Drilling Fluids Program									
Interval	Fluid Type	Density	Fluid Loss	Maximum Chlorides	Depth				
		(ppg)	(mL/30 min)	(ppm)	(ft. MD)				
Surface	Water/Gel	8.4 – 9.2	NC	1,000	0' - 320'				
Intermediate	LSND / Gel	8.4 – 9.2	6-16	5,000	320′ – 4,210′				
Production	LSND / Gel / Air	8.4 – 9.2	6-16	5,000	4,210′ – 6,917′				

#### **Drilling Fluids Notes:**

- Lost circulation material may be added to the mud systems to manage fluid losses as hole conditions dictate.
- Depending on the area and losses encountered, the production section may be drilled on air instead of fluid.
- 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: 439 bbls (2,463 ft<sup>3</sup>).

#### 8. Estimated Pressures & Drilling Hazards

#### A. Estimated Pressures

Fruitland Coal: 400 psi Pictured Cliffs: 460 psi Mesa Verde: 900 psi

Dakota: 1,400 psi

- No abnormal temperatures or drilling hazards are anticipated.
- The Mesa Verde and Dakota formations will be completed and comingled if both formations are completed.

#### 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 and production sections. 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.

#### Gonsales State Com #1M



#### 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 60' from intermediate casing shoe to TD of the well.
- B. MWD
- Measurement while drilling tools will be utilized from the surface casing shoe to TD of the production hole to measure and record inclination and azimuth.
- C. LWD
- There are no plans for logging while drilling.
- D. Open Hole Logging
- There are no plans to open hole log the well.
- E. Coring & Formation Testing
- There are no plans for coring or formation testing.
- F. Cased Hole Logging
- The 7" 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 well is planned as a directional wellbore. Surveys will be monitored to ensure adherence to the planned
- The directional plan is attached in the APD application.

San Juan County, NM

Gonsales State Com #1M



#### 12. Completion

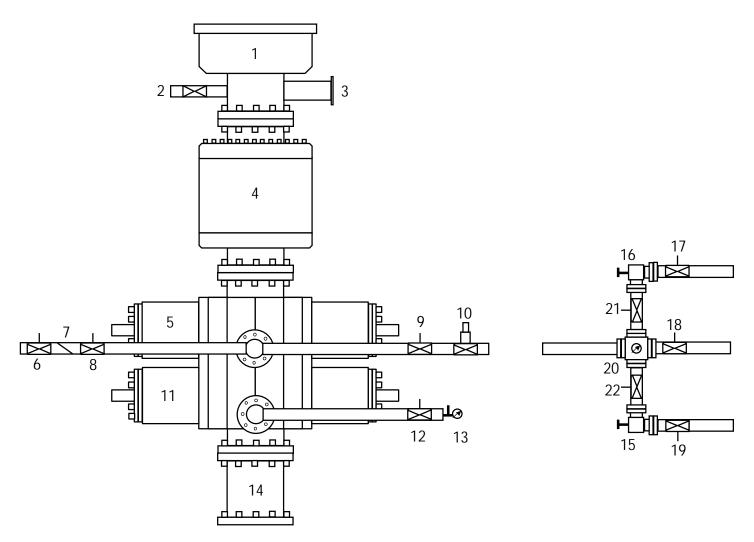
- A. Pressure Testing
- A pressure test of the 4-1/2" production casing will be conducted to the maximum anticipated frac pressure for 30 minutes.
- B. Stimulation
- The well will be stimulated with sand and water. The number of stages and amount of proppant used will be adjusted based on actual reservoir thickness and real-time pumping conditions during the stimulation.

San Juan County, NM



# Appendix A

## 11" 3M BOP & 3M 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	3M Annular Preventer	15	Manual Choke
5	3M 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	3M Blind Rams	22	Manual Isolation Valve

#### State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

## NATURAL GAS MANAGEMENT PLAN

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

#### Section 1 – Plan Description Effective May 25, 2021

I. Operator: Hilcorp Ener	gy Compan	y	O	<b>GRID:</b> <u>3</u>	72171 I	Date: 8/8/2	.025
I. Type: ⊠ Original □ Amendment due to □ 19.15.27.9.D(6)(a) NMAC □ 19.15.27.9.D(6)(b) NMAC □ Other.							
If Other, please describe:							
<b>III. Well(s):</b> Provide the fobe recompleted from a sing					set of wells pro	oposed to be dri	lled or proposed to
Well Name	API	ULSTR	Foota	ges	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Gonsales State Com 1M		A, 16,30N,11W	1029' FNL &	314' FEL	6	1000	6
	W. 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  Completion  Date  Tommencement Date  Back Date  Date						
Gonsales State Com 1M		2026					2026
VI. Separation Equipment:   Attach a complete description of how Operator will size separation equipment to optimize gas capture.  VII. Operational Practices:   Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.  VIII. Best Management Practices:   Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.							

### Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

#### IX. Anticipated Natural Gas Production:

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

#### X. Natural Gas Gathering System (NGGS):

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

XI. Map. $\square$ 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 $\square$ will $\square$ 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 po	ortion, of the
natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the r	iew well(s).

	Attach (	Operator'	e nlan to i	managa	production	in response	to the	increased	line proces	1112
ш	Attach	Operator	s bian to i	manage i	production	in response	e to the	increased	line pressi	ure.

XIV. Confidentiality: Uperator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided	ın
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	n
for which confidentiality is asserted and the basis for such assertion.	

(h)

(i)

# Section 3 - Certifications Effective May 25, 2021

	Directive May 20, 2021				
Operator certifies that, aft	er reasonable inquiry and based on the available information at the time of submittal:				
one hundred percent of the	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, aking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or				
hundred percent of the an into account the current at	Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one nundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking not 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. ☐ Operato D of 19.15.27.9 NMAC; of	r will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection or				
	n. □ 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;				
( <b>d</b> )	liquids removal on lease;				
(e)	reinjection for underground storage;				
( <b>f</b> )	reinjection for temporary storage;				
(g)	reinjection for enhanced oil recovery;				

#### **Section 4 - Notices**

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

other alternative beneficial uses approved by the division.

fuel cell production; and

- (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 Cherylene Weston
Printed Name: Cherylene Weston
Title: Operations Regulatory Tech Sr.
E-mail Address: <a href="mailto:cweston@hilcorp.com">cweston@hilcorp.com</a>
Date: 8/8/2025
Phone: 713-289-2615
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

# Hilcorp Energy Natural Gas Management Plan Attachments

#### VI. Separation Equipment

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

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

#### VII. Operational Practices 19.15.27.8 NMAC A through F

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

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

#### E. Performance standards:

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

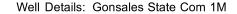


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Company: Hilcorp Energy - San Juan Basin Project: San Juan, NM NAD27 Site: Gonsales State Com 1M Pad Well: Gonsales State Com 1M

Wellbore: OH Design: Plan #1





GL 5755' & RKB 17' @ 5772.00ft (Drake 3)

Northing +N/-S+E/-W Latittude

Easting 454749.54 0.00 0.00 2116529.91

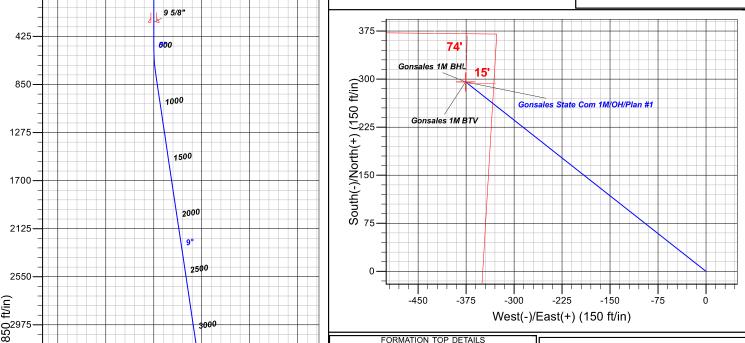
36.816576

Longitude -107.987922 Slot



Azimuths to True North Magnetic North: 8.40°

> Magnetic Field Strength: 49067.9nT Dip Angle: 63.12° Date: 8/6/2025 Model: HDGM2025



#### TVDPath 3975.00 MDPath Formation Menefee

4009.58 6795.58 6866.58 6761.00 6832.00 Encinal Canyon Burro Canyon

Plan: Plan #1 9:13, August 07 2025 Created By: Janie Collins

PROJECT DETAILS: San Juan, NM NAD27

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

System Datum: Mean Sea Level

CASING DETAILS						
TVD	MD	Name				
300.00	300.00	9 5/8"				
4175.00	4209.58	7"				
6832.00	6866.58	4 1/2"				

SECTION DETAILS										
MD 0.00 500.00 784.14 3725.45 4009.58	Inc 0.00 0.00 8.52 8.52 0.00	Azi 0.000 0.000 308.186 308.186 0.000	TVD 0.00 500.00 783.09 3691.91 3975.00	+N/-S 0.00 0.00 13.04 282.57 295.61	+E/-W 0.00 0.00 -16.58 -359.26 -375.84	Dleg 0.00 0.00 3.00 0.00 3.00	TFace 0.00 0.00 308.19 0.00 180.00	VSect 0.00 0.00 21.10 457.07 478.17		
6866.58	0.00	0.000	6832.00	295.61	-375.84	0.00	0.00	478.17		

L				DEGIGIT IA	NOLT DETAILS			
G	ame onsales 1M BTV onsales 1M BHL	TVD 3975.00 6832.00	+N/-S 295.61 295.61	+E/-W -375.84 -375.84	Northing 2116826.12 2116826.12	Easting 454374.18 454374.18	Latitude 36.817388 36.817388	Longitude -107.989206 -107.989206

1275— - 1275— - - - 1700—	1500
2125— - 2125— - -	2000
2550 <u> </u>	2500
True Vertical Depth (850 ft/in)	3000
93400—	3500
- - - - - - - - - - - - - - - - - - -	
Frue	Gonsales 1M BTV 4000
4250 <u> </u>	
4675— - 4675—	4500
5100 <u> </u>	5000
5525— - -	5500
5950— - - - -	6000
6375 <u> </u>	Gonsales 1M BHL 6500
6800 <u>-</u>  	Gonsales State Com 1M/OH/Plan #1 4 1/2"
	-850 -425 0 425 850 1275
eleased to	Vertical Section at 308.186° (850 ft/in) <i>Imaging: 9/15/2025 3:47:06 PM</i>



# Hilcorp Energy - San Juan Basin

San Juan, NM NAD27 Gonsales State Com 1M Pad Gonsales State Com 1M

OH

Plan: Plan #1

# **Standard Planning Report**

06 August, 2025



www.scientificdrilling.com

# Hilcorp

Project:

## **Scientific Drilling**

#### **Planning Report**



Database: Grand Junction
Company: Hilcorp Energy

Hilcorp Energy - San Juan Basin San Juan, NM NAD27

Site: Gonsales State Com 1M Pad
Well: Gonsales State Com 1M

Wellbore: OH
Design: Plan #1

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well Gonsales State Com 1M

GL 5755' & RKB 17' @ 5772.00ft (Drake 3) GL 5755' & RKB 17' @ 5772.00ft (Drake 3)

True

Minimum Curvature

Project San Juan, NM NAD27

Map System:US State Plane 1927 (Exact solution)Geo Datum:NAD 1927 (NADCON CONUS)

Map Zone: New Mexico West 3003

System Datum:

Mean Sea Level

Site Gonsales State Com 1M Pad

Northing: 2,116,529.90 usft Site Position: Latitude: 36.816576 From: Lat/Long Easting: 454,749.54 usft Longitude: -107.987922 **Position Uncertainty:** 0.00 ft Slot Radius: **Grid Convergence:** -0.09 13.20 in

Well Gonsales State Com 1M

 Well Position
 +N/-S
 0.00 ft
 Northing:
 2,116,529.90 usft
 Latitude:
 36.816576

 +E/-W
 0.00 ft
 Easting:
 454,749.54 usft
 Longitude:
 -107.987922

Position Uncertainty 0.00 ft Wellhead Elevation: Ground Level: 5,755.00 ft

Wellbore ОН Magnetics **Model Name** Sample Date Declination Dip Angle Field Strength (°) (°) (nT) 49,067.90000000 HDGM2025 8/6/2025 8.40 63.12

Plan #1 Design Audit Notes: Version: Phase: PLAN Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 308.186

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	
784.14	8.52	308.186	783.09	13.04	-16.58	3.00	3.00	0.00	308.19	
3,725.45	8.52	308.186	3,691.91	282.57	-359.26	0.00	0.00	0.00	0.00	
4,009.58	0.00	0.000	3,975.00	295.61	-375.84	3.00	-3.00	0.00	180.00	Gonsales 1M BTV
6,866.58	0.00	0.000	6,832.00	295.61	-375.84	0.00	0.00	0.00	0.00	Gonsales 1M BHL

# **Scientific Drilling**

Planning Report Hilcorp



**Grand Junction** Database: Company: Hilcorp Energy - San Juan Basin Project: San Juan, NM NAD27

Gonsales State Com 1M Pad Site: Well: Gonsales State Com 1M Wellhore

**Local Co-ordinate Reference:** 

TVD Reference: MD Reference: North Reference: **Survey Calculation Method:**  Well Gonsales State Com 1M GL 5755' & RKB 17' @ 5772.00ft (Drake 3) GL 5755' & RKB 17' @ 5772.00ft (Drake 3)

Minimum Curvature

Wellbore:	ОН								
Design:	Plan #1								
Diamed Comes									
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.000	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.000	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.000	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.000	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.000	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	3.00	308.186	599.95	1.62	-2.06	2.62	3.00	3.00	0.00
700.00	6.00	308.186	699.63	6.47	-8.22	10.46	3.00	3.00	0.00
784.14	8.52	308.186	783.09	13.04	-16.58	21.10	3.00	3.00	0.00
800.00	8.52	308.186	798.78	14.50	-18.43	23.45	0.00	0.00	0.00
900.00	8.52	308.186	897.67	23.66	-30.08	38.27	0.00	0.00	0.00
1,000.00	8.52	308.186	996.57	32.82	-41.73	53.09	0.00	0.00	0.00
1,100.00	8.52	308.186	1,095.46	41.99	-53.38	67.92	0.00	0.00	0.00
1,200.00	8.52	308.186	1,194.36	51.15	-65.03	82.74	0.00	0.00	0.00
1,300.00	8.52	308.186	1,293.25	60.31	-76.68	97.56	0.00	0.00	0.00
1,400.00	8.52	308.186	1,392.15	69.48	-88.33	112.38	0.00	0.00	0.00
1,500.00	8.52	308.186	1,491.05	78.64	-99.98	127.21	0.00	0.00	0.00
1,600.00	8.52	308.186	1,589.94	87.80	-111.64	142.03	0.00	0.00	0.00
1,700.00	8.52	308.186	1,688.84	96.97	-123.29	156.85	0.00	0.00	0.00
1,800.00	8.52	308.186	1,787.73	106.13	-134.94	171.67	0.00	0.00	0.00
								0.00	
1,900.00	8.52 8.52	308.186 308.186	1,886.63 1,985.52	115.29 124.46	-146.59 -158.24	186.50 201.32	0.00 0.00	0.00 0.00	0.00 0.00
2,000.00 2,100.00	8.52	308.186	2,084.42	133.62	-156.2 <del>4</del> -169.89	201.32	0.00	0.00	0.00
2,100.00	8.52	308.186	2,183.31	142.78	-181.54	230.96	0.00	0.00	0.00
2,300.00	8.52	308.186	2,282.21	151.95	-193.19	245.78	0.00	0.00	0.00
2,400.00	8.52	308.186	2,381.10	161.11	-204.84	260.61	0.00	0.00	0.00
2,500.00	8.52	308.186	2,480.00	170.28	-216.49	275.43	0.00	0.00	0.00
2,600.00	8.52	308.186	2,578.89 2,677.79	179.44	-228.14	290.25 305.07	0.00	0.00 0.00	0.00 0.00
2,700.00 2,800.00	8.52 8.52	308.186 308.186	2,776.69	188.60 197.77	-239.79 -251.44	319.90	0.00 0.00	0.00	0.00
2,900.00	8.52	308.186	2,875.58	206.93	-263.09	334.72	0.00	0.00	0.00
3,000.00	8.52	308.186	2,974.48	216.09	-274.74	349.54	0.00	0.00	0.00
3,100.00	8.52	308.186	3,073.37	225.26	-286.39	364.36	0.00	0.00	0.00
3,200.00	8.52	308.186	3,172.27	234.42	-298.04	379.19	0.00	0.00	0.00
3,300.00	8.52	308.186	3,271.16	243.58	-309.69	394.01	0.00	0.00	0.00
3,400.00	8.52	308.186	3,370.06	252.75	-321.35	408.83	0.00	0.00	0.00
3,500.00	8.52	308.186	3,468.95	261.91	-333.00	423.65	0.00	0.00	0.00
3,600.00	8.52	308.186	3,567.85	271.07	-344.65	438.48	0.00	0.00	0.00
3,700.00	8.52	308.186	3,666.74	280.24	-356.30	453.30	0.00	0.00	0.00
3,725.45	8.52	308.186	3,691.91	282.57	-359.26	457.07	0.00	0.00	0.00
3,800.00	6.29	308.186	3,765.84	288.51	-366.81	466.68	3.00	-3.00	0.00
3,900.00	3.29	308.186	3,865.48	293.67	-373.37	475.03	3.00	-3.00	0.00
4,000.00	0.29	308.186	3,965.42	295.60	-375.83	478.14	3.00	-3.00	0.00
4,009.58	0.00	0.000	3,975.00	295.61	-375.84	478.17	3.00	-3.00	0.00
4,100.00	0.00	0.000	4,065.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,200.00	0.00	0.000	4,165.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,300.00	0.00	0.000	4,265.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,400.00	0.00	0.000	4,365.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,500.00	0.00	0.000	4,465.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,600.00	0.00	0.000	4,565.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,700.00	0.00	0.000	4,665.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,800.00	0.00	0.000	4,765.42	295.61	-375.84	478.17	0.00	0.00	0.00
4,900.00	0.00	0.000	4,865.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,000.00	0.00	0.000	4,965.42	295.61	-375.84	478.17	0.00	0.00	0.00
							_		

# Scientific Drilling Planning Report



Site:

Well:



Database: Grand Junction
Company: Hilcorp Energy
Project: San Juan, NM N

Hilcorp Energy - San Juan Basin San Juan, NM NAD27 Gonsales State Com 1M Pad Gonsales State Com 1M

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Gonsales State Com 1M

GL 5755' & RKB 17' @ 5772.00ft (Drake 3) GL 5755' & RKB 17' @ 5772.00ft (Drake 3)

True

Minimum Curvature

nned 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)
5,100.00	0.00	0.000	5,065.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,200.00	0.00	0.000	5,165.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,300.00	0.00	0.000	5,265.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,400.00	0.00	0.000	5,365.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,500.00	0.00	0.000	5,465.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,600.00	0.00	0.000	5,565.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,700.00	0.00	0.000	5,665.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,800.00	0.00	0.000	5,765.42	295.61	-375.84	478.17	0.00	0.00	0.00
5,900.00	0.00	0.000	5,865.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,000.00	0.00	0.000	5,965.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,100.00	0.00	0.000	6,065.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,200.00	0.00	0.000	6,165.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,300.00	0.00	0.000	6,265.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,400.00	0.00	0.000	6,365.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,500.00	0.00	0.000	6,465.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,600.00	0.00	0.000	6,565.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,700.00	0.00	0.000	6,665.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,800.00	0.00	0.000	6,765.42	295.61	-375.84	478.17	0.00	0.00	0.00
6,866.58	0.00	0.000	6,832.00	295.61	-375.84	478.17	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Gonsales 1M BTV - plan hits target cent - Point	0.00 er	0.000	3,975.00	295.61	-375.84	2,116,826.12	454,374.18	36.817388	-107.989206
Gonsales 1M BHL - plan hits target cent - Point	0.00 er	0.000	6,832.00	295.61	-375.84	2,116,826.12	454,374.18	36.817388	-107.989206

Casing Points							
	Measured Depth (ft)	Vertical Depth (ft)		Name	Casing Diameter (in)	Hole Diameter (in)	
	300.00	300.00	9 5/8"		9.62	12.25	
	4,209.58	4,175.00	7"		7.00	8.75	
	6,866.58	6,832.00	4 1/2"		4.50	6.25	

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	4,009.58	3,975.00	Menefee		0.00	0.000
	6,795.58	6,761.00	Encinal Canyon		0.00	0.000
	6,866.58	6,832.00	Burro Canyon		0.00	0.000

## **Scientific Drilling**

**Planning Report** 





Project:

Site: Well:

Database: Grand Junction
Company: Hilcorp Energy - San Juan Basin

San Juan, NM NAD27 Gonsales State Com 1M Pad Gonsales State Com 1M

Wellbore: OH
Design: Plan #1

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Gonsales State Com 1M

GL 5755' & RKB 17' @ 5772.00ft (Drake 3) GL 5755' & RKB 17' @ 5772.00ft (Drake 3)

True

Minimum Curvature

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720

Phone: (5/5) 393-6161 Fax: (5/5) 393-0/20

District II

811 S. First St., Artesia, NM 88210

Phone: (575) 748-1283 Fax: (575) 748-9720

District III

1000 Rio Brazos Road, Aztec, NM 87410

Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1204 S. St. Fengels Dr. Sente Fe. NM 97505

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

**Energy Minerals and Natural Resources Oil Conservation Division** 1220 South St. Francis Dr.

**Santa Fe, NM 87505** 

**State of New Mexico** 

Form C-101 Revised July 18, 2013

☐AMENDED REPORT

			<ul> <li>Dperator Name</li> <li>Hilcorp Energy</li> <li>382 Road</li> <li>Aztec, NM</li> </ul>	Company 3100				<sup>2</sup> · OGRID Number 372171 <sup>3</sup> · API Number			
4. Prop	erty Code 8890				5. Property Name			<sup>6.</sup> Well No.			
- 31	0090				rface Location				1M		
UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County		
A	16	30N	11W		1029 N		314	Е	San Juan		
	1	1		8. Proposed	d Bottom Hole	Location	1 1				
UL - Lot A	Section 16	Township 30N	Range 11W	Lot Idn	Feet from 737	N/S Line N	Feet From 708	E/W Line E	County San Juan		
	1	1	1	9. Por	ol Information	1			ı		
Pool Name Mesaverde/Dakota								Pool Code 72319/7159			
				Additiona	ıl Well Inform	ation					
	rk Type N		<sup>12.</sup> Well Type G		<sup>14.</sup> Lease Type S	<sup>15.</sup> Ground Level Elevation 5755'					
	ultiple Y		<sup>17.</sup> Proposed Depth 6917'		<sup>18.</sup> Formation 6917'		<sup>19.</sup> Contractor		<sup>20.</sup> Spud Date 2026		
Depth to Grou	ind water		Dista	ince from nearest	fresh water well		Distance t	o nearest surface	water		
We will be	using a clo	osed-loop s	system in lieu of	lined pits			·				
	•		21. ]	Proposed Cas	ing and Ceme	nt Program					
Type	Hol	e Size	Casing Size	Casing W	eight/ft	Setting Depth	Sacks of C	Cement	Estimated TOC		
	12	1/4"	9 5/8"	32.3#/H4	0 STC	320'	145 s	x	Surf		
	8:	3/4"	7"	23# / J55	STC	4210'	467 s	X	Surf		
	6	1/4"	4 1/2"	11.6#/J55 STC 6917' 184 sx							
			Casing	g/Cement Pro	gram: Additio	onal Commen	ts				
			22.	Proposed Blov	wout Prevention	on Program	-				
	Туре			Proposed Blow Working Pressure		on Program  Test P	ressure	M	Ianufacturer		

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.	OIL CONSERVATION DIVISION				
I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐, if applicable.	Approved By:				
Signature: Cherylene Weston					
Printed name: Cherylene Weston	Title:				
Title: Operations/Regulatory Tech Sr.	Approved Date:	Expiration Date:			
E-mail Address: <a href="mailto:cweston@hilcorp.com">cweston@hilcorp.com</a>					
Date: 8/8/2025 Phone: 713-289-2615	Conditions of Approval Attached				