

Santa Fe Main Office Phone: (505) 476-3441 Fax: (55) 476-3462 General Information Phone: (505) 629-6116 Online Phone Directory Visit: https://www.emnrd.nm.gov/ocd/contact-us/	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	C-104 Revised July 9, 2024 Submit Electronically Via OCD Permitting
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REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Section 1 - Operator and Well Information

Submittal Type: ☒ Test Allowable (C-104RT) ☐ New Well (C-104NW) ☐ Recomplete (C-104RC) ☐ Pay Add (C-104RC) ☐ Amended	
Operator Name: Hilcorp Energy Company	OGRID: 372171
Property Name and Well Number: Jicarilla A 2	Property Code: 319687
Mineral Owner: ☐ State ☐ Fee ☒ Tribal ☐ Federal	API Number: 30-039-06450
Pool Name: BLANCO MESAVERDE	Pool Code: 72319

Section 2 – Surface Location

UL M	Section 14	Township 026N	Range 004W	Lot	Ft. from N/S 998' South	Ft. from E/W 720' West	Latitude 36.481922	Longitude -107.227516	County RIO ARRIBA
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Section 3 – Completion Information

Producing Method	Ready Date ~11/26/2024	Perforations MD ~5,246' - 6,188'	Perforations TVD ~5,245' - 6,187'
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Section 4 – Action IDs for Submissions and Order Numbers

List Action IDs for Drilling Sundries	Was an Order required / needed (Y/N), if yes list Order number:
C-104 RT Action ID (if C-104NW): N/A	Communitization Agreement ☐ Yes ☒ No, Order No.
Surface Casing Action ID: Previous to system	Unit: ☐ Yes ☒ No, Order No.
Intermediate 1 Casing Action ID: Previous to system	Compulsory Pooling: ☐ Yes ☒ No, Order No.
Intermediate 2 Casing Action ID: Previous to system	Down Hole Commingling: ☒ Yes ☐ No, Order No. DHC-5420
Production Casing Action ID: 405497	Surface Commingling: ☐ Yes ☒ No, Order No.
All casing was pressure tested in accordance with NMAC ☒ Yes ☐ No	Non-standard Location: ☐ Yes ☒ No ☐ Common ownership Order No.
Liner 1 Action ID: N/A	Non-standard Proration: ☐ Yes ☒ No, Order No.
Casing was installed prior to OCD's Action ID system (Y/N): Y	Simultaneous Dedication: ☐ Yes ☒ No, Order No.

Section 5 - Operator Signature and Certification

☒ I hereby certify that the required Water Use Report has been, or will be, submitted for this well's completion.	
☒ I hereby certify that the required Fracfocus disclosure has been, or will be, submitted for this well's completion.	
☒ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.	
Name Cherylene Weston	
Title: Operations Regulatory Tech Sr.	Date: 11/15/2024

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

WELL LOCATION INFORMATION

API Number 30-039-06450	Pool Code 72319	Pool Name BLANCO MESAVERDE
Property Code 319687	Property Name JICARILLA A	Well Number 002
OGRID No. 372171	Operator Name HILCORP ENERGY COMPANY	Ground Level Elevation 6904'
Surface Owner: ☐ State ☐ Fee ☒ Tribal ☐ Federal		Mineral Owner: ☐ State ☐ Fee ☒ Tribal ☐ Federal

Surface Location

UL M	Section 14	Township 26N	Range 4W	Lot	Feet from N/S Line 998' SOUTH	Feet from E/W Line 720' WEST	Latitude 36.481922 °N	Longitude -107.227516 °W	County RIO ARRIBA
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Bottom Hole Location

UL M	Section 14	Township 26N	Range 4W	Lot	Feet from N/S Line 984' SOUTH	Feet from E/W Line 712' WEST	Latitude 36.481886 °N	Longitude -107.227545 °W	County RIO ARRIBA
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Dedicated Acres 320.00	Penetrated Spacing Unit: W/2 - Section 14	Infill or Defining Well Infill	Defining Well API 30-039-21030	Overlapping Spacing Unit ☐ Yes ☒ No	Consolidation Code
Order Numbers DHC-5420			Well setbacks are under Common Ownership: ☒ Yes ☐ No		

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
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First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
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Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet from N/S Line	Feet from E/W Line	Latitude	Longitude	County
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☐ Horizontal ☐ Vertical ☒ Directional	Ground Floor Elevation 6904'
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OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division. <u>Cherylene Weston</u> Signature <u>11/18/2024</u> Date <u>Cherylene Weston, Operations/Regulatory Tech-Sr.</u> Printed Name <u>cweston@hilcorp.com</u> E-mail Address	SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.  <u>JASON C. EDWARDS</u> Signature and Seal of Professional Surveyor <table><tr><td>Certificate Number 15269</td><td>Date of Survey MAY 31, 2024</td></tr></table>	Certificate Number 15269	Date of Survey MAY 31, 2024
Certificate Number 15269	Date of Survey MAY 31, 2024		

SURFACE LOCATION (A)
 998' FSL 720' FWL
 LAT 36.481911 °N
 LONG -107.226918 °W
 DATUM: NAD1927

BOTTOM-HOLE LOC (B)
 984' FSL 712' FWL
 LAT 36.481875 °N
 LONG -107.226946 °W
 DATUM: NAD1927

LAT 36.481922 °N
 LONG -107.227516 °W
 DATUM: NAD1983

LAT 36.481886 °N
 LONG -107.227545 °W
 DATUM: NAD1983

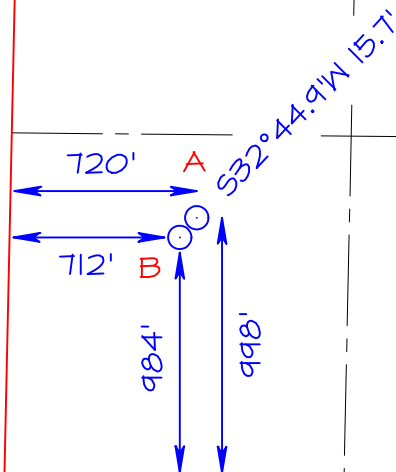
WEST 5290.56' (RECORD)
 N89 °26 '52 "W 5225.88' (CALCULATED)

LEASE
 JICARILLA
 CONTRACT 105

14

NORTH 5280.00' (RECORD)
 N01 °14 '00 "E 5272.04' (CALCULATED)

N01 °06 '59 "E 5270.73' (CALCULATED)
 NORTH 5280.00' (RECORD)



N89 °27 '40 "W 5236.64' (CALCULATED)
 WEST 5297.82' (RECORD)



Survey Certification

7327 West Barton Road
Casper, WY 82604
(307)-472-6621

Operator	HilCorp Energy
Well Name & No.	Jicarilla A2
API #	30-039-06450
County & State	Rio Arriba County, NM
SDI Job #	OP.046163
Rig	Drake 3
Survey Date	9/21/2024 to 9/24/2024
GL & KB Elevation	GL 6904 & KB 17' = 6921'

I, Janie Collins, having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 95.15 feet to a measured depth of 7,971 feet is true and correct as determined from all available records.

A handwritten signature in blue ink, appearing to read 'Janie Collins', written over a horizontal line.

Signature

1-Nov-2024

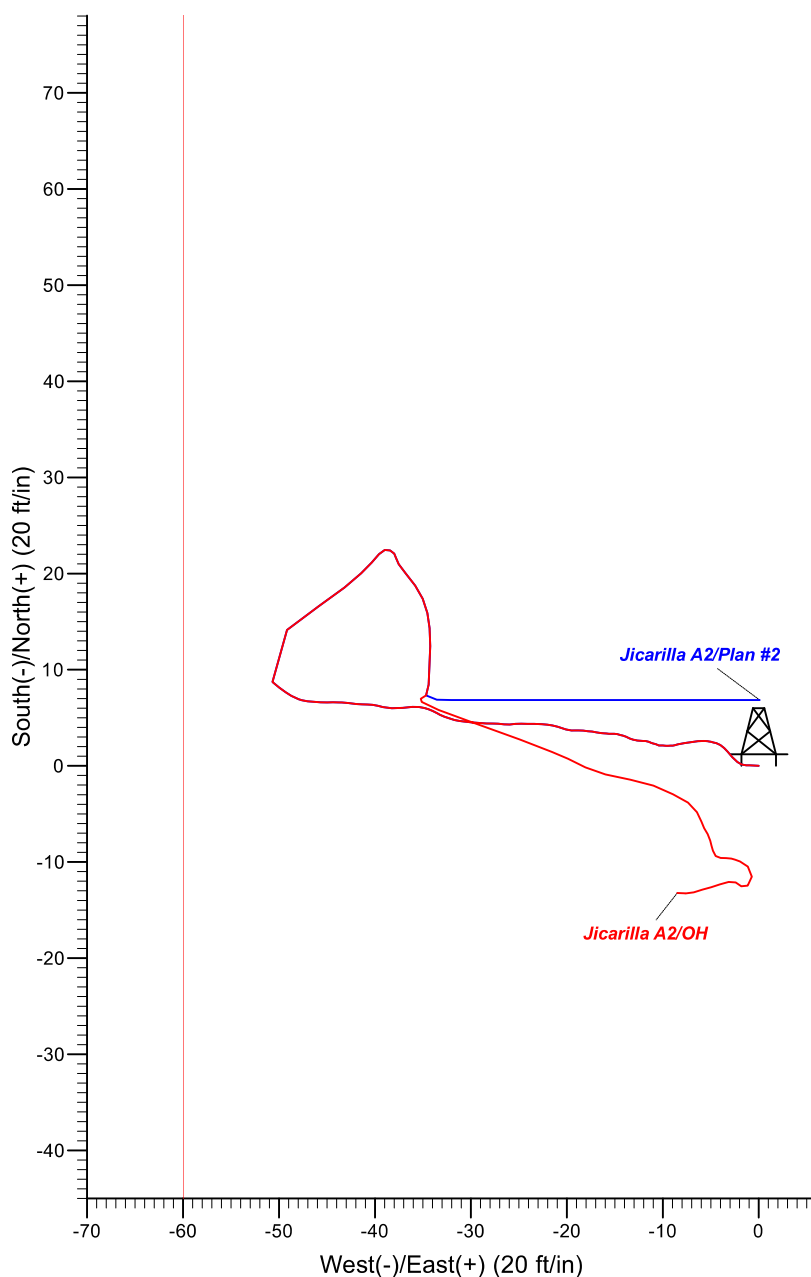
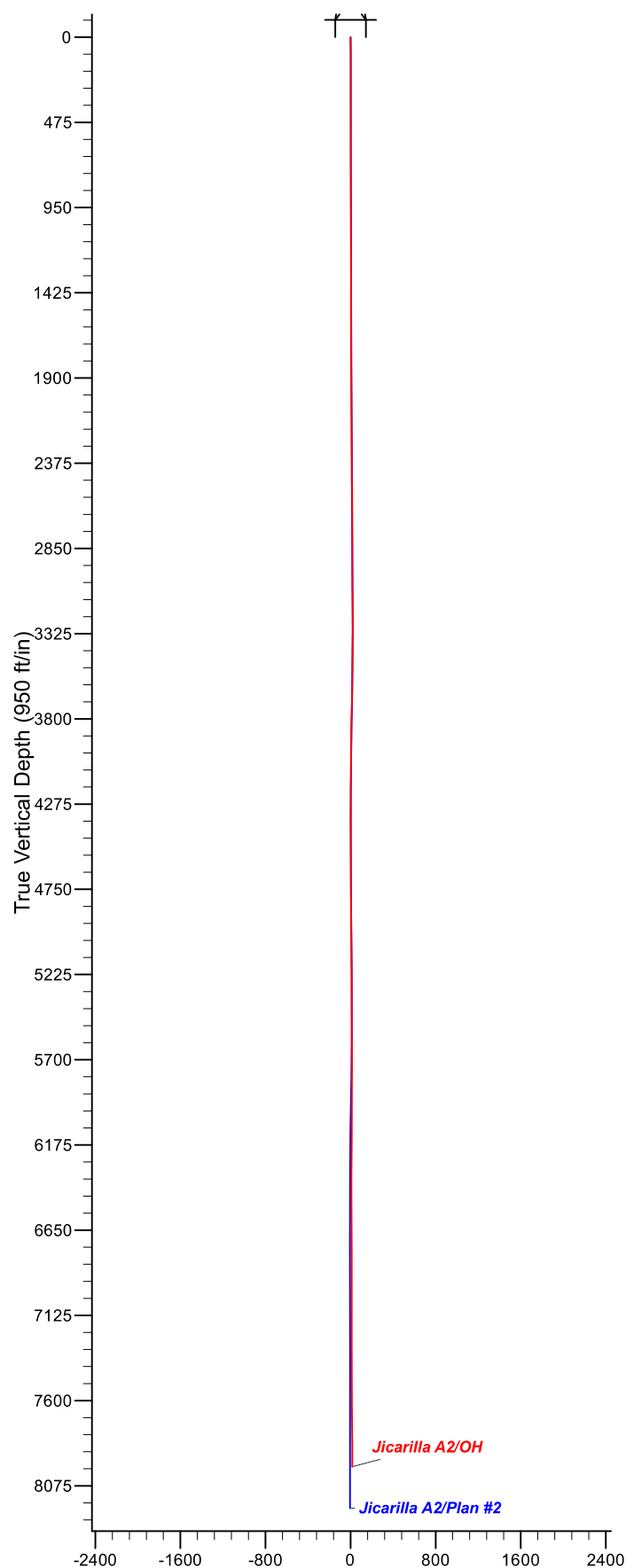
Date

Janie Collins

Rockies Region Well Planner
Scientific Drilling - Rocky Mountain District



Company: Hilcorp Energy - San Juan Basin
 Project: Rio Arriba, NM NAD27
 Site: Jicarilla A2
 Well: Jicarilla A2
 Wellbore: OH
 Design: OH



Well Details: Jicarilla A2

+N/-S	+E/-W	North	East	Latitude	Longitude	Slot
0.00	0.00	1995223.33	678277.63	36.4819110	-107.2269180	

PROJECT DETAILS: Rio Arriba, 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

Plan: OH

10:32, November 01 2024
 Created By: Janie Collins



Hilcorp Energy - San Juan Basin

Rio Arriba, NM NAD27

Jicarilla A2

Jicarilla A2

OH

Design: OH

Standard Survey Report

01 November, 2024



www.scientificdrilling.com





Scientific Drilling Survey Report



Company:	Hilcorp Energy - San Juan Basin	Local Co-ordinate Reference:	Well Jicarilla A2
Project:	Rio Arriba, NM NAD27	TVD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Site:	Jicarilla A2	MD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Well:	Jicarilla A2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction

Project	Rio Arriba, NM NAD27		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico West 3003		

Site		Jicarilla A2			
Site Position:		Northing:	1,995,223.33 usft	Latitude:	36.4819110
From:	Lat/Long	Easting:	678,277.62 usft	Longitude:	-107.2269180
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in	Grid Convergence:	0.36 °

Well	Jicarilla A2					
Well Position	+N/-S	0.00 ft	Northing:	1,995,223.33 usft	Latitude:	36.4819110
	+E/-W	0.00 ft	Easting:	678,277.62 usft	Longitude:	-107.2269180
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	6,904.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM2024	9/20/2024	8.28	62.87	49,013.30000000

Design	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.00	0.00	0.00	212.741	

Survey Program	Date	9/24/2024			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
95.15	3,425.66	Survey #1 - Gyro Survey (OH)	Standard Keeper 104	Standard Wireline Keeper ver 1.0.4	
3,641.00	6,591.00	Survey #3 - MWD Survey (OH)	MWD+HDGM	OWSG MWD + HDGM	
6,654.00	7,971.00	Survey #4 - Production (OH)	MWD+HDGM	OWSG MWD + HDGM	

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	
95.15	0.75	274.940	95.15	0.05	-0.62	0.29	0.79	0.79	0.00	
121.46	0.74	268.370	121.46	0.06	-0.96	0.47	0.33	-0.04	-24.97	
147.81	0.73	272.990	147.80	0.07	-1.30	0.65	0.23	-0.04	17.53	
170.36	0.77	280.340	170.35	0.10	-1.59	0.78	0.46	0.18	32.59	
198.44	0.68	292.780	198.43	0.20	-1.93	0.88	0.64	-0.32	44.30	
222.00	0.67	313.250	221.99	0.35	-2.16	0.87	1.02	-0.04	86.88	
248.54	0.60	311.710	248.53	0.55	-2.38	0.82	0.27	-0.26	-5.80	
271.69	0.69	314.530	271.67	0.73	-2.57	0.78	0.41	0.39	12.18	



Scientific Drilling Survey Report



Company:	Hilcorp Energy - San Juan Basin	Local Co-ordinate Reference:	Well Jicarilla A2
Project:	Rio Arriba, NM NAD27	TVD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Site:	Jicarilla A2	MD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Well:	Jicarilla A2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction

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)	
296.20	0.72	321.980	296.18	0.95	-2.77	0.70	0.39	0.12	30.40	
321.10	0.69	316.360	321.08	1.18	-2.97	0.61	0.30	-0.12	-22.57	
348.96	0.81	317.480	348.94	1.45	-3.22	0.52	0.43	0.43	4.02	
373.56	0.74	316.580	373.54	1.69	-3.44	0.44	0.29	-0.28	-3.66	
397.94	0.72	312.150	397.91	1.91	-3.66	0.38	0.25	-0.08	-18.17	
422.57	0.68	308.420	422.54	2.10	-3.89	0.34	0.25	-0.16	-15.14	
448.28	0.61	292.170	448.25	2.25	-4.14	0.35	0.76	-0.27	-63.21	
473.85	0.66	291.080	473.82	2.36	-4.40	0.40	0.20	0.20	-4.26	
498.61	0.69	282.550	498.58	2.44	-4.68	0.48	0.42	0.12	-34.45	
524.75	0.63	285.160	524.72	2.51	-4.97	0.58	0.26	-0.23	9.98	
545.37	0.62	279.660	545.33	2.56	-5.19	0.66	0.29	-0.05	-26.67	
573.93	0.53	276.200	573.89	2.60	-5.48	0.78	0.34	-0.32	-12.11	
599.17	0.63	266.240	599.13	2.60	-5.73	0.91	0.56	0.40	-39.46	
620.39	0.58	265.120	620.35	2.59	-5.96	1.05	0.24	-0.24	-5.28	
648.23	0.49	266.190	648.19	2.57	-6.21	1.20	0.33	-0.32	3.84	
671.80	0.52	272.790	671.76	2.56	-6.42	1.32	0.28	0.13	28.00	
696.30	0.53	252.630	696.26	2.54	-6.64	1.46	0.75	0.04	-82.29	
720.76	0.62	264.910	720.72	2.49	-6.88	1.63	0.62	0.37	50.20	
748.62	0.63	258.600	748.57	2.45	-7.18	1.83	0.25	0.04	-22.65	
773.49	0.62	267.100	773.44	2.41	-7.45	2.00	0.37	-0.04	34.18	
797.66	0.55	258.040	797.61	2.38	-7.69	2.16	0.48	-0.29	-37.48	
821.59	0.58	261.020	821.54	2.34	-7.93	2.32	0.18	0.13	12.45	
846.11	0.63	261.360	846.06	2.30	-8.18	2.49	0.20	0.20	1.39	
870.60	0.58	252.520	870.55	2.24	-8.43	2.67	0.43	-0.20	-36.10	
898.99	0.58	259.550	898.94	2.17	-8.71	2.88	0.25	0.00	24.76	
922.76	0.64	255.450	922.70	2.12	-8.96	3.06	0.31	0.25	-17.25	
947.33	0.48	281.250	947.27	2.10	-9.19	3.20	1.20	-0.65	105.01	
971.75	0.65	259.440	971.69	2.10	-9.43	3.33	1.11	0.70	-89.31	
995.55	0.42	274.200	995.49	2.08	-9.65	3.47	1.12	-0.97	62.02	
1,020.39	0.40	289.110	1,020.33	2.12	-9.82	3.53	0.44	-0.08	60.02	
1,048.57	0.34	264.180	1,048.51	2.14	-10.00	3.61	0.60	-0.21	-88.47	
1,072.37	0.28	262.500	1,072.31	2.12	-10.12	3.69	0.25	-0.25	-7.06	
1,096.88	0.25	275.040	1,096.82	2.12	-10.24	3.75	0.27	-0.12	51.16	
1,121.47	0.17	271.410	1,121.41	2.13	-10.33	3.80	0.33	-0.33	-14.76	
1,145.18	0.21	280.690	1,145.12	2.14	-10.41	3.83	0.21	0.17	39.14	
1,173.59	0.23	297.320	1,173.53	2.17	-10.51	3.86	0.23	0.07	58.54	
1,198.34	0.35	298.920	1,198.28	2.23	-10.62	3.87	0.49	0.48	6.46	
1,223.00	0.27	273.040	1,222.94	2.27	-10.74	3.90	0.65	-0.32	-104.95	
1,246.39	0.38	288.710	1,246.33	2.30	-10.87	3.95	0.60	0.47	66.99	
1,270.39	0.40	286.260	1,270.33	2.35	-11.03	3.99	0.11	0.08	-10.21	
1,298.34	0.46	293.400	1,298.28	2.42	-11.22	4.03	0.29	0.21	25.55	
1,321.62	0.50	290.760	1,321.56	2.49	-11.40	4.07	0.20	0.17	-11.34	
1,345.61	0.44	280.760	1,345.54	2.55	-11.59	4.13	0.42	-0.25	-41.68	



Scientific Drilling Survey Report



Company:	Hilcorp Energy - San Juan Basin	Local Co-ordinate Reference:	Well Jicarilla A2
Project:	Rio Arriba, NM NAD27	TVD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Site:	Jicarilla A2	MD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Well:	Jicarilla A2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction

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)
1,373.40	0.51	276.620	1,373.33	2.58	-11.82	4.22	0.28	0.25	-14.90
1,396.83	0.47	269.080	1,396.76	2.59	-12.02	4.32	0.32	-0.17	-32.18
1,420.97	0.49	275.850	1,420.90	2.60	-12.22	4.42	0.25	0.08	28.04
1,448.70	0.53	279.550	1,448.63	2.63	-12.46	4.53	0.19	0.14	13.34
1,472.18	0.47	274.880	1,472.11	2.66	-12.67	4.61	0.31	-0.26	-19.89
1,496.59	0.45	282.460	1,496.52	2.69	-12.86	4.69	0.26	-0.08	31.05
1,520.94	0.51	275.990	1,520.87	2.72	-13.06	4.78	0.33	0.25	-26.57
1,549.36	0.61	296.120	1,549.29	2.80	-13.32	4.85	0.77	0.35	70.83
1,573.65	0.60	298.160	1,573.58	2.92	-13.55	4.88	0.10	-0.04	8.40
1,598.84	0.68	293.940	1,598.76	3.04	-13.80	4.91	0.37	0.32	-16.75
1,620.40	0.69	282.030	1,620.32	3.12	-14.05	4.97	0.66	0.05	-55.24
1,649.05	0.82	288.230	1,648.97	3.22	-14.41	5.09	0.54	0.45	21.64
1,674.19	0.72	281.490	1,674.11	3.31	-14.74	5.19	0.54	-0.40	-26.81
1,699.30	0.72	271.530	1,699.22	3.34	-15.05	5.33	0.50	0.00	-39.67
1,723.88	0.64	269.800	1,723.79	3.35	-15.34	5.48	0.34	-0.33	-7.04
1,748.91	0.63	274.040	1,748.82	3.36	-15.62	5.62	0.19	-0.04	16.94
1,773.95	0.55	274.970	1,773.86	3.38	-15.88	5.75	0.32	-0.32	3.71
1,798.37	0.61	271.660	1,798.28	3.39	-16.12	5.87	0.28	0.25	-13.55
1,823.57	0.45	282.120	1,823.48	3.41	-16.35	5.97	0.74	-0.63	41.51
1,848.13	0.72	272.290	1,848.04	3.44	-16.60	6.08	1.17	1.10	-40.02
1,872.08	0.90	284.410	1,871.99	3.49	-16.93	6.22	1.03	0.75	50.61
1,896.86	1.02	275.010	1,896.76	3.56	-17.34	6.38	0.80	0.48	-37.93
1,922.11	1.09	279.260	1,922.01	3.62	-17.80	6.58	0.42	0.28	16.83
1,946.63	1.18	272.410	1,946.52	3.67	-18.29	6.80	0.66	0.37	-27.94
1,970.83	1.10	272.060	1,970.72	3.69	-18.77	7.05	0.33	-0.33	-1.45
1,995.25	1.00	267.780	1,995.13	3.69	-19.21	7.29	0.52	-0.41	-17.53
2,021.22	1.04	279.960	2,021.10	3.72	-19.67	7.51	0.85	0.15	46.90
2,045.98	0.97	283.290	2,045.86	3.81	-20.10	7.67	0.37	-0.28	13.45
2,070.71	1.04	286.430	2,070.58	3.92	-20.52	7.80	0.36	0.28	12.70
2,098.29	1.08	291.470	2,098.16	4.08	-21.00	7.92	0.37	0.15	18.27
2,122.68	1.27	278.870	2,122.54	4.21	-21.48	8.08	1.31	0.78	-51.66
2,147.16	1.31	278.050	2,147.02	4.29	-22.03	8.30	0.18	0.16	-3.35
2,170.47	1.52	274.370	2,170.32	4.35	-22.60	8.56	0.98	0.90	-15.79
2,199.09	1.63	269.730	2,198.93	4.38	-23.38	8.96	0.59	0.38	-16.21
2,223.99	1.60	269.840	2,223.82	4.38	-24.08	9.35	0.12	-0.12	0.44
2,248.21	1.55	271.190	2,248.03	4.38	-24.75	9.70	0.26	-0.21	5.57
2,272.66	1.38	265.820	2,272.47	4.37	-25.37	10.05	0.89	-0.70	-21.96
2,297.12	1.36	263.780	2,296.92	4.31	-25.96	10.41	0.22	-0.08	-8.34
2,321.27	1.34	277.880	2,321.07	4.32	-26.52	10.71	1.37	-0.08	58.39
2,349.56	1.20	274.970	2,349.35	4.39	-27.14	10.99	0.54	-0.49	-10.29
2,373.96	1.28	269.330	2,373.75	4.41	-27.67	11.26	0.60	0.33	-23.11
2,397.75	1.31	271.440	2,397.53	4.42	-28.21	11.54	0.24	0.13	8.87
2,422.35	1.34	274.390	2,422.12	4.44	-28.78	11.83	0.30	0.12	11.99



Scientific Drilling Survey Report



Company:	Hilcorp Energy - San Juan Basin	Local Co-ordinate Reference:	Well Jicarilla A2
Project:	Rio Arriba, NM NAD27	TVD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Site:	Jicarilla A2	MD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Well:	Jicarilla A2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction

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)	
2,446.80	1.47	273.750	2,446.57	4.49	-29.37	12.11	0.54	0.53	-2.62	
2,470.22	1.37	276.610	2,469.98	4.54	-29.95	12.38	0.52	-0.43	12.21	
2,497.93	1.40	275.470	2,497.68	4.61	-30.62	12.68	0.15	0.11	-4.11	
2,521.89	1.27	276.160	2,521.63	4.67	-31.17	12.94	0.55	-0.54	2.88	
2,545.82	1.24	285.900	2,545.56	4.76	-31.69	13.13	0.90	-0.13	40.70	
2,572.52	1.36	288.840	2,572.25	4.95	-32.26	13.29	0.51	0.45	11.01	
2,596.49	1.21	291.300	2,596.21	5.13	-32.77	13.41	0.67	-0.63	10.26	
2,620.43	1.19	295.850	2,620.15	5.33	-33.23	13.49	0.41	-0.08	19.01	
2,648.90	1.13	299.130	2,648.61	5.60	-33.74	13.54	0.31	-0.21	11.52	
2,673.00	1.34	291.800	2,672.71	5.82	-34.21	13.61	1.09	0.87	-30.41	
2,698.19	1.33	286.760	2,697.89	6.01	-34.76	13.75	0.47	-0.04	-20.01	
2,723.42	1.08	277.210	2,723.12	6.12	-35.28	13.93	1.27	-0.99	-37.85	
2,747.70	1.12	268.350	2,747.39	6.15	-35.74	14.16	0.72	0.16	-36.49	
2,772.97	1.07	268.840	2,772.66	6.13	-36.23	14.43	0.20	-0.20	1.94	
2,798.16	1.11	259.640	2,797.84	6.09	-36.70	14.73	0.71	0.16	-36.52	
2,822.48	1.05	266.170	2,822.16	6.03	-37.16	15.02	0.56	-0.25	26.85	
2,847.69	1.12	269.640	2,847.36	6.01	-37.63	15.30	0.38	0.28	13.76	
2,873.07	1.13	271.370	2,872.74	6.02	-38.13	15.56	0.14	0.04	6.82	
2,897.42	1.20	275.340	2,897.08	6.05	-38.62	15.80	0.44	0.29	16.30	
2,922.78	1.21	281.080	2,922.44	6.12	-39.15	16.03	0.48	0.04	22.63	
2,948.15	1.26	285.180	2,947.80	6.25	-39.68	16.21	0.40	0.20	16.16	
2,973.25	1.29	275.080	2,972.90	6.34	-40.23	16.42	0.90	0.12	-40.24	
2,998.48	1.21	274.660	2,998.12	6.39	-40.78	16.68	0.32	-0.32	-1.66	
3,023.71	1.24	269.730	3,023.34	6.41	-41.32	16.95	0.43	0.12	-19.54	
3,048.33	1.08	273.830	3,047.96	6.42	-41.82	17.21	0.73	-0.65	16.65	
3,073.34	1.14	279.770	3,072.96	6.48	-42.30	17.42	0.52	0.24	23.75	
3,098.72	1.06	273.620	3,098.34	6.54	-42.78	17.64	0.56	-0.32	-24.23	
3,122.80	1.13	273.550	3,122.42	6.57	-43.24	17.86	0.29	0.29	-0.29	
3,147.67	1.31	273.870	3,147.28	6.60	-43.77	18.12	0.72	0.72	1.29	
3,172.53	1.50	272.460	3,172.13	6.64	-44.38	18.42	0.78	0.76	-5.67	
3,196.88	1.33	263.790	3,196.47	6.62	-44.97	18.76	1.12	-0.70	-35.61	
3,221.39	1.54	274.170	3,220.98	6.61	-45.59	19.09	1.36	0.86	42.35	
3,246.73	1.55	274.470	3,246.31	6.66	-46.27	19.42	0.05	0.04	1.18	
3,270.38	1.41	274.640	3,269.95	6.71	-46.88	19.71	0.59	-0.59	0.72	
3,296.54	1.37	284.280	3,296.10	6.82	-47.50	19.96	0.91	-0.15	36.85	
3,321.10	1.55	290.060	3,320.65	7.00	-48.10	20.12	0.95	0.73	23.53	
3,345.90	1.58	300.600	3,345.44	7.29	-48.71	20.21	1.17	0.12	42.50	
3,370.77	1.73	302.430	3,370.30	7.67	-49.32	20.22	0.64	0.60	7.36	
3,396.59	1.88	309.830	3,396.11	8.15	-49.97	20.17	1.07	0.58	28.66	
3,420.32	1.72	309.860	3,419.83	8.62	-50.54	20.08	0.67	-0.67	0.13	
3,425.66	1.72	309.950	3,425.17	8.73	-50.67	20.06	0.05	0.00	1.69	
3,641.00	2.77	50.130	3,640.40	14.14	-49.15	14.69	1.63	0.49	46.52	
3,738.00	2.14	57.020	3,737.31	16.63	-45.83	10.80	0.72	-0.65	7.10	
3,839.00	1.60	50.340	3,838.26	18.56	-43.17	7.74	0.58	-0.53	-6.61	



Scientific Drilling

Survey Report



Company:	Hilcorp Energy - San Juan Basin	Local Co-ordinate Reference:	Well Jicarilla A2
Project:	Rio Arriba, NM NAD27	TVD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Site:	Jicarilla A2	MD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Well:	Jicarilla A2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction

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)	
3,939.00	1.01	48.080	3,938.23	20.03	-41.43	5.56	0.59	-0.59	-2.26	
4,039.00	0.79	40.670	4,038.22	21.15	-40.33	4.03	0.25	-0.22	-7.41	
4,140.00	0.54	41.540	4,139.21	22.03	-39.56	2.87	0.25	-0.25	0.86	
4,239.00	0.34	74.000	4,238.21	22.46	-38.97	2.18	0.32	-0.20	32.79	
4,340.00	0.35	115.230	4,339.21	22.41	-38.40	1.92	0.24	0.01	40.82	
4,439.00	0.28	145.820	4,438.21	22.08	-37.99	1.97	0.18	-0.07	30.90	
4,539.00	0.31	164.170	4,538.20	21.62	-37.78	2.25	0.10	0.03	18.35	
4,639.00	0.47	152.110	4,638.20	21.00	-37.52	2.63	0.18	0.16	-12.06	
4,738.00	0.94	138.790	4,737.19	20.03	-36.79	3.05	0.50	0.47	-13.45	
4,838.00	0.92	145.140	4,837.18	18.75	-35.79	3.58	0.10	-0.02	6.35	
4,940.00	0.85	154.890	4,939.17	17.40	-35.00	4.30	0.16	-0.07	9.56	
5,040.00	0.95	168.530	5,039.16	15.91	-34.52	5.29	0.24	0.10	13.64	
5,139.00	0.91	174.800	5,138.14	14.32	-34.29	6.50	0.11	-0.04	6.33	
5,239.00	1.22	180.270	5,238.13	12.47	-34.22	8.02	0.33	0.31	5.47	
5,340.00	1.12	184.350	5,339.11	10.41	-34.30	9.80	0.13	-0.10	4.04	
5,440.00	1.14	180.310	5,439.09	8.44	-34.38	11.50	0.08	0.02	-4.04	
5,519.00	0.63	220.860	5,518.08	7.33	-34.67	12.59	0.98	-0.65	51.33	
5,587.00	0.52	259.240	5,586.07	6.99	-35.22	13.17	0.58	-0.16	56.44	
5,650.00	0.87	124.680	5,649.07	6.66	-35.10	13.38	2.05	0.56	-213.59	
5,712.00	2.70	112.970	5,711.04	5.82	-33.37	13.15	2.99	2.95	-18.89	
5,775.00	2.71	108.660	5,773.97	4.77	-30.60	12.54	0.32	0.02	-6.84	
5,838.00	2.79	107.900	5,836.90	3.82	-27.72	11.78	0.14	0.13	-1.21	
5,901.00	2.81	113.580	5,899.82	2.73	-24.85	11.14	0.44	0.03	9.02	
5,964.00	2.51	109.080	5,962.75	1.66	-22.13	10.57	0.58	-0.48	-7.14	
6,026.00	2.00	115.630	6,024.71	0.75	-19.87	10.12	0.92	-0.82	10.56	
6,089.00	1.69	116.990	6,087.67	-0.15	-18.05	9.89	0.50	-0.49	2.16	
6,151.00	2.41	104.260	6,149.63	-0.88	-15.98	9.38	1.37	1.16	-20.53	
6,214.00	2.45	99.210	6,212.58	-1.43	-13.36	8.43	0.35	0.06	-8.02	
6,277.00	2.09	111.110	6,275.53	-2.06	-10.96	7.66	0.94	-0.57	18.89	
6,340.00	1.95	116.270	6,338.49	-2.94	-8.93	7.30	0.36	-0.22	8.19	
6,403.00	1.29	123.680	6,401.46	-3.81	-7.38	7.20	1.10	-1.05	11.76	
6,466.00	1.27	148.950	6,464.45	-4.80	-6.43	7.52	0.89	-0.03	40.11	
6,528.00	0.77	164.850	6,526.44	-5.79	-5.96	8.10	0.92	-0.81	25.65	
6,591.00	0.57	149.310	6,589.43	-6.47	-5.69	8.52	0.43	-0.32	-24.67	
6,654.00	0.74	146.860	6,652.43	-7.08	-5.31	8.83	0.27	0.27	-3.89	
6,717.00	0.64	172.290	6,715.42	-7.77	-5.04	9.26	0.51	-0.16	40.37	
6,780.00	0.38	155.310	6,778.42	-8.31	-4.91	9.64	0.47	-0.41	-26.95	
6,842.00	0.64	171.080	6,840.42	-8.84	-4.77	10.01	0.47	0.42	25.44	
6,905.00	0.53	126.930	6,903.42	-9.36	-4.48	10.30	0.72	-0.17	-70.08	
6,968.00	0.50	96.240	6,966.41	-9.57	-3.97	10.20	0.44	-0.05	-48.71	
7,030.00	0.59	88.870	7,028.41	-9.59	-3.39	9.90	0.18	0.15	-11.89	
7,093.00	0.40	104.490	7,091.41	-9.64	-2.85	9.65	0.37	-0.30	24.79	
7,155.00	0.38	109.130	7,153.41	-9.76	-2.45	9.53	0.06	-0.03	7.48	



Scientific Drilling
Survey Report



Company:	Hilcorp Energy - San Juan Basin	Local Co-ordinate Reference:	Well Jicarilla A2
Project:	Rio Arriba, NM NAD27	TVD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Site:	Jicarilla A2	MD Reference:	GL 6904' & RKB 17' @ 6921.00ft (Drake 3)
Well:	Jicarilla A2	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction

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)	
7,218.00	0.57	108.310	7,216.41	-9.93	-1.95	9.40	0.30	0.30	-1.30	
7,281.00	1.25	130.820	7,279.40	-10.47	-1.13	9.42	1.20	1.08	35.73	
7,343.00	1.10	188.550	7,341.39	-11.50	-0.71	10.06	1.84	-0.24	93.11	
7,406.00	0.90	226.610	7,404.38	-12.44	-1.16	11.09	1.08	-0.32	60.41	
7,469.00	0.72	313.470	7,467.37	-12.51	-1.81	11.50	1.78	-0.29	137.87	
7,531.00	0.60	293.380	7,529.37	-12.11	-2.39	11.48	0.42	-0.19	-32.40	
7,594.00	0.81	258.020	7,592.36	-12.07	-3.12	11.85	0.75	0.33	-56.13	
7,657.00	0.89	252.980	7,655.36	-12.31	-4.03	12.53	0.17	0.13	-8.00	
7,719.00	0.91	251.650	7,717.35	-12.61	-4.96	13.28	0.05	0.03	-2.15	
7,782.00	0.83	255.770	7,780.34	-12.88	-5.87	14.01	0.16	-0.13	6.54	
7,845.00	0.88	250.660	7,843.34	-13.15	-6.77	14.72	0.14	0.08	-8.11	
7,907.00	0.78	276.180	7,905.33	-13.26	-7.64	15.29	0.61	-0.16	41.16	
7,909.00	0.76	274.000	7,907.33	-13.26	-7.67	15.30	1.77	-1.00	-109.00	
7,971.00	0.76	274.000	7,969.32	-13.20	-8.49	15.69	0.00	0.00	0.00	

Checked By: _____

Approved By: _____

Date: _____

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

ACKNOWLEDGMENTS

Action 406496

ACKNOWLEDGMENTS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 406496
	Action Type: [C-104] Completion Packet - Test Allowable (C-104RT)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.
☒	I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

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

CONDITIONS

Action 406496

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 406496
	Action Type: [C-104] Completion Packet - Test Allowable (C-104RT)

CONDITIONS

Created By	Condition	Condition Date
smcgrath	ACCEPTED FOR RECORD ONLY	11/25/2024
smcgrath	RT Expires 02/24/2025	11/25/2024