

DISTRICT I
1825 N. French Dr., Hobbs, N.M. 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. First St., Artesia, N.M. 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

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

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, N.M. 87505

JUL 20 2017
Revised August 1, 2011
Submit one copy to appropriate
District Office

AS-DRILLED

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35638	² Pool Code 98102	³ Pool Name PINON UNIT HZ (OIL)
⁴ Property Code 314246 17 565	⁵ Property Name PINON UNIT	⁶ Well Number 306H
⁷ OGRID No. 371654	⁸ Operator Name JUNIPER RESOURCES EXPLORATION CO. LLC.	⁹ Elevation 6732

¹⁰ Surface Location

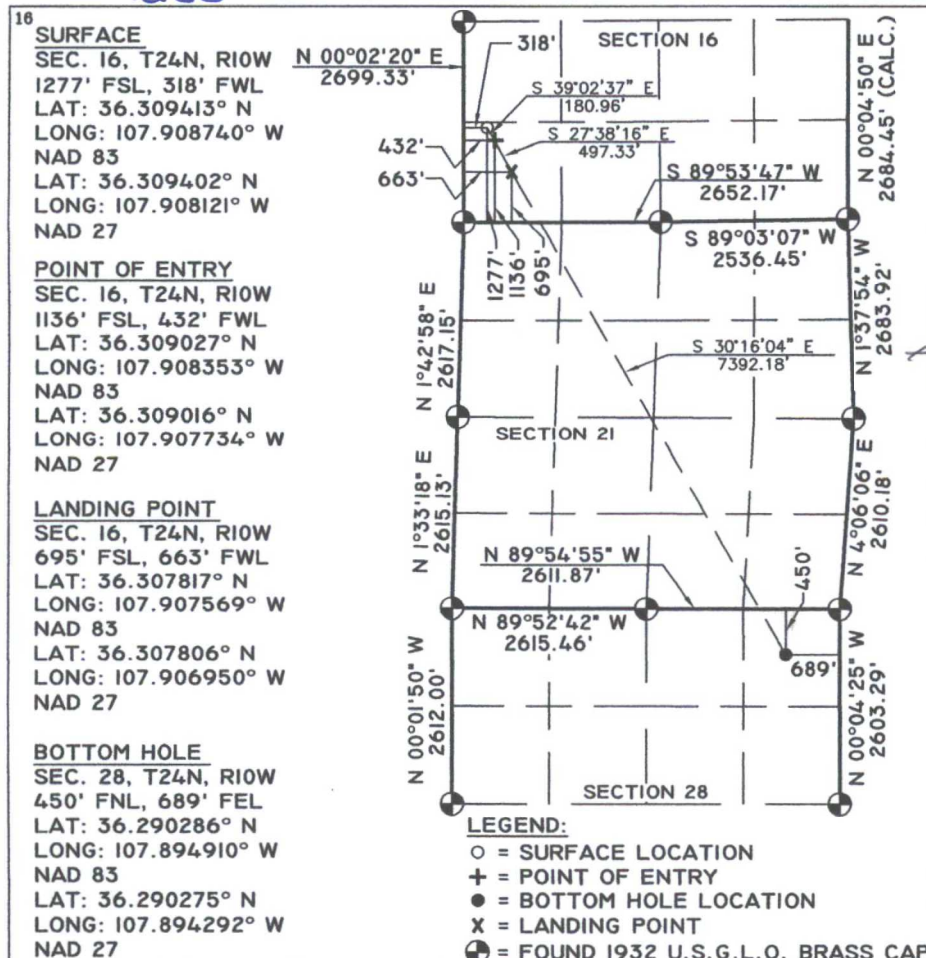
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	16	24 N	10 W		1277	SOUTH	318	WEST	SAN JUAN

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	28	24 N	10 W		450	NORTH	689	EAST	SAN JUAN

¹² Dedicated PENETRATED SPACING UNITS: S/2 SEC. 16, ALL OF SEC. 21, N/2 SEC. 28, T24N, R10W, 1280 ACRES 8005.44 ACRES-W/2 SEC. 4, ALL SEC. 5-10, 15-18 & 21, N/2 SEC. 22 & 28, T24N, R10W - UNDIVIDED UNIT	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No. R-13857A (8005.44 ACRES)
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
Total acres 1280 OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

¹⁷ OPERATOR CERTIFICATION

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

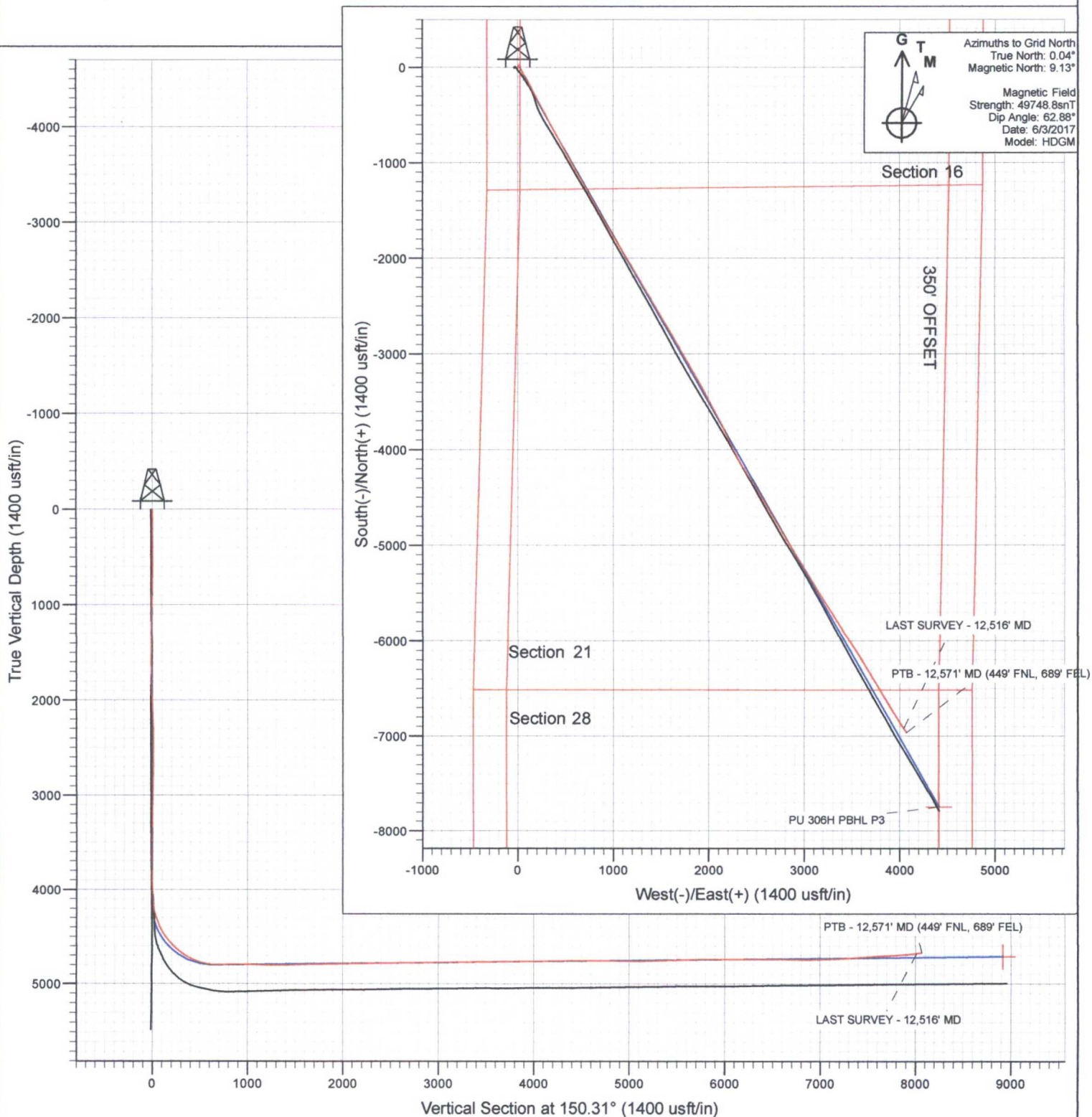
Signature: *Matt Strickler* Date: *7/18/17*
Printed Name: *Matt Strickler*
E-mail Address: *matt.strickler@junprsources.com*

¹⁸ SURVEYOR CERTIFICATION

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

Date of Survey: *3-20-17*
Signature and Seal of Professional Surveyor: *Marshall W. Lindeen*
Professional Surveyor: *17078*
Certificate Number: *17078*

AV



CATHEDRAL

WELL DETAILS: PINON UNIT 306H

+N/-S	+E/-W	Northing	Ground Level: Easting	Latitude	Longitude
0.00	0.00	1931934.97	2700874.78	36.309413	-107.908740



Cathedral Energy Services

Survey Report

Company:	Juniper Resources Exploration CO	Local Co-ordinate Reference:	Well PINON UNIT 306H
Project:	NEW MEXICO	TVD Reference:	14' @ 6748.00usft (TBD)
Site:	S16-T24N-R10W	MD Reference:	14' @ 6748.00usft (TBD)
Well:	PINON UNIT 306H	North Reference:	Grid
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	NEW MEXICO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Western Zone		

Site		S16-T24N-R10W			
Site Position:		Northing:	1,931,934.99 usft	Latitude:	36.309413
From:	Lat/Long	Easting:	2,700,844.73 usft	Longitude:	-107.908842
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	-0.04 °

Well	PINON UNIT 306H					
Well Position	+N/-S	0.00 usft	Northing:	1,931,934.97 usft	Latitude:	36.309413
	+E/-W	0.00 usft	Easting:	2,700,874.78 usft	Longitude:	-107.908740
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	6,734.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	6/3/2017	9.08	62.88	49,748.80000000

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	150.31	

Survey Program	Date	6/10/2017			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
369.00	12,571.00	Survey #1 (OH)	MWD+HDGM	OWSG MWD + HDGM	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
369.00	0.57	237.96	368.99	-0.97	-1.56	0.08	0.15	0.15	
429.00	0.22	213.96	428.99	-1.23	-1.87	0.14	0.63	-0.58	
490.00	0.66	107.97	489.99	-1.43	-1.60	0.45	1.23	0.72	
550.00	1.36	78.44	549.98	-1.40	-0.58	0.93	1.42	1.17	
611.00	1.67	71.67	610.96	-0.97	0.97	1.33	0.59	0.51	
671.00	2.37	62.79	670.92	-0.13	2.91	1.55	1.27	1.17	
732.00	3.03	58.13	731.85	1.30	5.40	1.55	1.14	1.08	
792.00	4.09	45.92	791.74	3.62	8.28	0.95	2.16	1.77	
853.00	5.10	38.80	852.54	7.25	11.54	-0.58	1.90	1.66	
913.00	5.36	39.68	912.29	11.49	15.00	-2.55	0.45	0.43	
974.00	5.01	37.92	973.04	15.78	18.46	-4.56	0.63	-0.57	
1,034.00	3.69	26.67	1,032.87	19.57	20.94	-6.63	2.61	-2.20	

Cathedral Energy Services

Survey Report

Company: Juniper Resources Exploration CO
Project: NEW MEXICO
Site: S16-T24N-R10W
Well: PINON UNIT 306H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well PINON UNIT 306H
TVD Reference: 14' @ 6748.00usft (TBD)
MD Reference: 14' @ 6748.00usft (TBD)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
1,095.00	1.93	9.88	1,093.80	22.34	22.00	-8.51	3.16	-2.89	
1,217.00	0.97	350.11	1,215.76	25.38	22.17	-11.07	0.88	-0.79	
1,337.00	1.06	260.19	1,335.74	26.19	20.90	-12.40	1.20	0.07	
1,458.00	1.67	253.25	1,456.71	25.49	18.11	-13.17	0.52	0.50	
1,579.00	1.71	248.07	1,577.66	24.31	14.75	-13.81	0.13	0.03	
1,699.00	1.27	178.54	1,697.62	22.31	13.12	-12.88	1.45	-0.37	
1,820.00	1.63	185.14	1,818.58	19.26	13.00	-10.29	0.33	0.30	
1,940.00	2.37	178.63	1,938.51	15.08	12.91	-6.70	0.64	0.62	
2,062.00	2.20	152.97	2,060.42	10.47	14.03	-2.14	0.84	-0.14	
2,184.00	1.93	125.46	2,182.34	7.19	16.77	2.06	0.83	-0.22	
2,304.00	1.36	93.20	2,302.29	5.94	19.84	4.67	0.89	-0.47	
2,425.00	1.14	56.82	2,423.27	6.52	22.28	5.37	0.67	-0.18	
2,547.00	1.63	35.55	2,545.23	8.59	24.30	4.57	0.58	0.40	
2,669.00	2.02	40.03	2,667.17	11.65	26.69	3.10	0.34	0.32	
2,790.00	1.41	7.95	2,788.12	14.76	28.27	1.18	0.92	-0.50	
2,911.00	0.97	313.90	2,909.09	16.94	27.74	-0.98	0.95	-0.36	
3,032.00	0.84	322.24	3,030.08	18.36	26.46	-2.84	0.15	-0.11	
3,156.00	1.49	253.51	3,154.06	18.62	24.36	-4.11	1.15	0.52	
3,282.00	1.41	282.52	3,280.02	18.49	21.27	-5.52	0.58	-0.06	
3,407.00	1.45	265.82	3,404.98	18.71	18.19	-7.24	0.33	0.03	
3,533.00	1.58	250.97	3,530.94	18.02	14.96	-8.25	0.33	0.10	
3,660.00	0.40	190.50	3,657.92	17.02	13.23	-8.23	1.12	-0.93	
3,785.00	0.88	175.99	3,782.91	15.63	13.21	-7.03	0.40	0.38	
3,848.00	1.23	184.26	3,845.90	14.47	13.20	-6.04	0.60	0.56	
3,962.00	2.99	176.99	3,959.82	10.28	13.26	-2.36	1.56	1.54	
4,087.00	2.73	168.08	4,084.66	4.11	14.05	3.38	0.41	-0.21	
4,150.00	3.74	152.88	4,147.56	0.82	15.29	6.87	2.09	1.60	
4,213.00	10.28	145.06	4,210.06	-5.63	19.46	14.52	10.47	10.38	
4,276.00	17.14	145.32	4,271.23	-17.88	27.97	29.39	10.89	10.89	
4,339.00	20.44	146.20	4,330.86	-34.66	39.37	49.61	5.26	5.24	
4,402.00	23.56	151.30	4,389.27	-54.86	51.54	73.18	5.80	4.95	
4,466.00	30.32	148.05	4,446.30	-79.81	66.25	102.15	10.81	10.56	
4,529.00	35.77	146.02	4,499.09	-108.60	84.97	136.43	8.83	8.65	
4,593.00	39.29	149.45	4,549.84	-141.57	105.73	175.36	6.39	5.50	
4,655.00	43.55	153.67	4,596.33	-177.64	125.20	216.34	8.21	6.87	
4,719.00	49.31	155.34	4,640.42	-219.49	145.12	262.56	9.20	9.00	
4,782.00	55.11	154.37	4,679.01	-264.53	166.28	312.17	9.29	9.21	
4,844.00	60.16	151.82	4,712.20	-311.20	190.00	364.45	8.85	8.15	
4,907.00	64.34	151.12	4,741.52	-360.17	216.62	420.18	6.71	6.63	
4,970.00	70.97	152.26	4,765.46	-411.44	244.23	478.40	10.66	10.52	
5,034.00	77.65	151.74	4,782.76	-465.81	273.14	539.95	10.47	10.44	
5,098.00	82.97	151.65	4,793.53	-521.34	303.05	603.00	8.31	8.31	
5,138.00	85.39	150.77	4,797.58	-556.21	322.21	642.78	6.43	6.05	
5,204.00	92.46	152.18	4,798.82	-614.15	353.70	708.71	10.92	10.71	
5,266.00	90.92	150.68	4,796.99	-668.57	383.34	770.67	3.47	-2.48	
5,329.00	90.97	152.00	4,795.95	-723.85	413.55	833.65	2.10	0.08	
5,392.00	91.32	151.74	4,794.70	-779.39	443.25	896.62	0.69	0.56	
5,456.00	89.30	150.68	4,794.35	-835.48	474.07	960.60	3.56	-3.16	
5,520.00	89.08	151.39	4,795.25	-891.47	505.06	1,024.59	1.16	-0.34	
5,583.00	89.21	150.68	4,796.19	-946.58	535.56	1,087.58	1.15	0.21	
5,646.00	88.64	150.59	4,797.38	-1,001.48	566.45	1,150.57	0.92	-0.90	
5,709.00	87.54	151.03	4,799.48	-1,056.44	597.16	1,213.53	1.88	-1.75	
5,772.00	87.98	150.24	4,801.94	-1,111.31	628.03	1,276.48	1.43	0.70	

Cathedral Energy Services

Survey Report

Company: Juniper Resources Exploration CO
Project: NEW MEXICO
Site: S16-T24N-R10W
Well: PINON UNIT 306H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well PINON UNIT 306H
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Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
5,835.00	90.35	150.33	4,802.86	-1,166.01	659.25	1,339.47	3.76	3.76	
5,898.00	91.36	150.24	4,801.92	-1,220.72	690.47	1,402.46	1.61	1.60	
5,961.00	92.02	150.77	4,800.06	-1,275.53	721.48	1,465.43	1.34	1.05	
6,025.00	92.55	150.51	4,797.51	-1,331.27	752.83	1,529.38	0.92	0.83	
6,089.00	91.45	150.68	4,795.27	-1,386.99	784.23	1,593.34	1.74	-1.72	
6,152.00	91.49	151.03	4,793.66	-1,441.99	814.91	1,656.31	0.56	0.06	
6,215.00	91.32	150.51	4,792.11	-1,496.95	845.66	1,719.29	0.87	-0.27	
6,279.00	90.18	150.24	4,791.27	-1,552.58	877.29	1,783.29	1.83	-1.78	
6,342.00	90.62	149.63	4,790.83	-1,607.10	908.86	1,846.28	1.19	0.70	
6,405.00	90.04	149.72	4,790.47	-1,661.48	940.66	1,909.28	0.93	-0.92	
6,469.00	90.88	149.28	4,789.96	-1,716.62	973.14	1,973.27	1.48	1.31	
6,532.00	91.19	149.63	4,788.82	-1,770.87	1,005.16	2,036.25	0.74	0.49	
6,595.00	90.79	148.92	4,787.73	-1,825.02	1,037.34	2,099.23	1.29	-0.63	
6,658.00	91.23	149.01	4,786.62	-1,878.99	1,069.82	2,162.20	0.71	0.70	
6,722.00	91.41	149.19	4,785.15	-1,933.90	1,102.67	2,226.17	0.40	0.28	
6,786.00	91.41	149.36	4,783.57	-1,988.90	1,135.36	2,290.14	0.27	0.00	
6,850.00	91.45	149.63	4,781.97	-2,044.02	1,167.84	2,354.12	0.43	0.06	
6,913.00	90.35	149.10	4,780.98	-2,098.22	1,199.94	2,417.10	1.94	-1.75	
6,977.00	90.48	148.05	4,780.52	-2,152.83	1,233.30	2,481.07	1.65	0.20	
7,040.00	91.41	150.33	4,779.48	-2,206.93	1,265.57	2,544.04	3.91	1.48	
7,105.00	90.18	149.28	4,778.58	-2,263.10	1,298.25	2,609.03	2.49	-1.89	
7,168.00	89.78	149.45	4,778.60	-2,317.31	1,330.36	2,672.02	0.69	-0.63	
7,231.00	89.56	148.31	4,778.97	-2,371.24	1,362.92	2,735.00	1.84	-0.35	
7,294.00	90.22	148.92	4,779.09	-2,425.02	1,395.72	2,797.97	1.43	1.05	
7,357.00	92.07	149.36	4,777.83	-2,479.09	1,428.03	2,860.94	3.02	2.94	
7,420.00	92.07	150.33	4,775.55	-2,533.53	1,459.66	2,923.90	1.54	0.00	
7,483.00	90.79	148.92	4,773.98	-2,587.86	1,491.50	2,986.87	3.02	-2.03	
7,547.00	90.40	150.15	4,773.31	-2,643.02	1,523.95	3,050.86	2.02	-0.61	
7,610.00	91.54	151.03	4,772.25	-2,697.89	1,554.88	3,113.85	2.29	1.81	
7,673.00	90.26	149.80	4,771.26	-2,752.67	1,585.98	3,176.84	2.82	-2.03	
7,736.00	90.40	149.63	4,770.90	-2,807.07	1,617.75	3,239.83	0.35	0.22	
7,800.00	91.10	150.77	4,770.06	-2,862.60	1,649.55	3,303.83	2.09	1.09	
7,864.00	91.10	150.15	4,768.83	-2,918.27	1,681.10	3,367.81	0.97	0.00	
7,927.00	91.36	151.30	4,767.48	-2,973.21	1,711.90	3,430.80	1.87	0.41	
7,991.00	89.52	148.49	4,766.99	-3,028.57	1,744.00	3,494.78	5.25	-2.87	
8,055.00	90.35	149.80	4,767.06	-3,083.51	1,776.82	3,558.77	2.42	1.30	
8,119.00	90.88	149.19	4,766.37	-3,138.65	1,809.30	3,622.76	1.26	0.83	
8,182.00	91.80	151.65	4,764.90	-3,193.41	1,840.39	3,685.74	4.17	1.46	
8,244.00	92.42	151.21	4,762.61	-3,247.83	1,870.02	3,747.68	1.23	1.00	
8,307.00	89.96	149.01	4,761.31	-3,302.43	1,901.41	3,810.66	5.24	-3.90	
8,370.00	89.65	150.59	4,761.52	-3,356.88	1,933.10	3,873.65	2.56	-0.49	
8,433.00	89.96	151.39	4,761.74	-3,411.97	1,963.65	3,936.65	1.36	0.49	
8,496.00	89.96	151.12	4,761.78	-3,467.21	1,993.95	3,999.64	0.43	0.00	
8,559.00	90.13	151.30	4,761.73	-3,522.42	2,024.29	4,062.63	0.39	0.27	
8,621.00	91.54	153.23	4,760.83	-3,577.29	2,053.14	4,124.58	3.85	2.27	
8,685.00	90.84	153.06	4,759.50	-3,634.37	2,082.04	4,188.49	1.13	-1.09	
8,748.00	90.88	153.23	4,758.55	-3,690.57	2,110.50	4,251.41	0.28	0.06	
8,808.00	89.21	152.88	4,758.50	-3,744.05	2,137.68	4,311.34	2.84	-2.78	
8,869.00	91.98	155.16	4,757.87	-3,798.88	2,164.40	4,372.20	5.88	4.54	
8,929.00	89.78	154.81	4,756.95	-3,853.24	2,189.77	4,431.99	3.71	-3.67	
8,989.00	91.76	156.57	4,756.14	-3,907.91	2,214.46	4,491.71	4.41	3.30	
9,050.00	91.01	154.90	4,754.67	-3,963.50	2,239.52	4,552.42	3.00	-1.23	
9,110.00	89.69	154.11	4,754.30	-4,017.66	2,265.35	4,612.25	2.56	-2.20	

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Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
9,171.00	89.08	151.74	4,754.96	-4,071.97	2,293.11	4,673.18	4.01	-1.00	
9,231.00	88.59	149.98	4,756.18	-4,124.36	2,322.32	4,733.16	3.04	-0.82	
9,292.00	89.82	149.72	4,757.02	-4,177.10	2,352.95	4,794.16	2.06	2.02	
9,353.00	89.60	148.75	4,757.33	-4,229.51	2,384.15	4,855.14	1.63	-0.36	
9,413.00	89.08	146.99	4,758.02	-4,280.32	2,416.06	4,915.08	3.06	-0.87	
9,473.00	89.43	147.17	4,758.80	-4,330.68	2,448.67	4,974.98	0.66	0.58	
9,534.00	89.08	146.99	4,759.60	-4,381.88	2,481.81	5,035.88	0.65	-0.57	
9,579.00	89.08	147.96	4,760.32	-4,419.82	2,506.01	5,080.82	2.16	0.00	
9,639.00	90.70	149.01	4,760.43	-4,470.97	2,537.37	5,140.78	3.22	2.70	
9,700.00	90.92	149.01	4,759.57	-4,523.25	2,568.77	5,201.76	0.36	0.36	
9,760.00	90.84	149.80	4,758.65	-4,574.89	2,599.31	5,261.75	1.32	-0.13	
9,821.00	91.80	150.07	4,757.25	-4,627.67	2,629.86	5,322.73	1.63	1.57	
9,882.00	91.89	149.36	4,755.28	-4,680.32	2,660.60	5,383.69	1.17	0.15	
9,943.00	92.11	149.54	4,753.15	-4,732.82	2,691.59	5,444.65	0.47	0.36	
10,003.00	92.90	149.36	4,750.53	-4,784.44	2,722.06	5,504.59	1.35	1.32	
10,063.00	91.76	148.92	4,748.09	-4,835.90	2,752.81	5,564.52	2.04	-1.90	
10,124.00	91.58	148.75	4,746.31	-4,888.08	2,784.36	5,625.48	0.41	-0.30	
10,184.00	92.29	150.42	4,744.29	-4,939.79	2,814.72	5,685.43	3.02	1.18	
10,245.00	90.88	149.89	4,742.60	-4,992.68	2,845.07	5,746.41	2.47	-2.31	
10,305.00	89.60	147.34	4,742.35	-5,043.89	2,876.31	5,806.38	4.76	-2.13	
10,366.00	89.82	147.61	4,742.66	-5,095.32	2,909.11	5,867.30	0.57	0.36	
10,425.00	89.47	148.22	4,743.02	-5,145.31	2,940.45	5,926.25	1.19	-0.59	
10,486.00	89.39	147.25	4,743.63	-5,196.89	2,973.01	5,987.18	1.60	-0.13	
10,546.00	89.74	149.10	4,744.08	-5,247.86	3,004.64	6,047.14	3.14	0.58	
10,607.00	90.92	150.95	4,743.73	-5,300.70	3,035.12	6,108.13	3.60	1.93	
10,666.00	90.40	149.72	4,743.05	-5,351.96	3,064.32	6,167.13	2.26	-0.88	
10,728.00	90.57	149.89	4,742.53	-5,405.55	3,095.50	6,229.12	0.39	0.27	
10,788.00	90.66	147.52	4,741.89	-5,456.81	3,126.66	6,289.09	3.95	0.15	
10,849.00	90.70	146.90	4,741.16	-5,508.09	3,159.69	6,350.00	1.02	0.07	
10,909.00	90.57	146.46	4,740.50	-5,558.22	3,192.65	6,409.87	0.76	-0.22	
10,970.00	90.22	147.17	4,740.08	-5,609.27	3,226.04	6,470.76	1.30	-0.57	
11,030.00	89.43	147.52	4,740.26	-5,659.79	3,258.41	6,530.67	1.44	-1.32	
11,091.00	88.24	147.34	4,741.50	-5,711.18	3,291.24	6,591.58	1.97	-1.95	
11,151.00	88.68	147.78	4,743.11	-5,761.80	3,323.42	6,651.49	1.04	0.73	
11,212.00	88.33	148.57	4,744.70	-5,813.61	3,355.57	6,712.43	1.42	-0.57	
11,273.00	88.68	148.31	4,746.29	-5,865.57	3,387.49	6,773.38	0.71	0.57	
11,334.00	90.18	150.24	4,746.90	-5,918.00	3,418.65	6,834.36	4.01	2.46	
11,395.00	90.88	146.73	4,746.34	-5,970.00	3,450.53	6,895.31	5.87	1.15	
11,455.00	90.31	144.79	4,745.71	-6,019.59	3,484.29	6,955.12	3.37	-0.95	
11,516.00	90.66	145.58	4,745.20	-6,069.67	3,519.11	7,015.87	1.42	0.57	
11,577.00	93.38	148.31	4,743.05	-6,120.76	3,552.36	7,076.72	6.32	4.46	
11,637.00	93.08	148.49	4,739.67	-6,171.78	3,583.75	7,136.59	0.58	-0.50	
11,697.00	92.86	147.43	4,736.56	-6,222.57	3,615.53	7,196.46	1.80	-0.37	
11,758.00	93.12	148.66	4,733.38	-6,274.25	3,647.77	7,257.33	2.06	0.43	
11,819.00	93.91	148.75	4,729.64	-6,326.28	3,679.40	7,318.19	1.30	1.30	
11,881.00	93.60	149.63	4,725.58	-6,379.42	3,711.09	7,380.04	1.50	-0.50	
11,945.00	93.34	149.54	4,721.70	-6,434.51	3,743.43	7,443.92	0.43	-0.41	
12,008.00	93.16	149.80	4,718.13	-6,488.80	3,775.19	7,506.81	0.50	-0.29	
12,071.00	93.38	148.92	4,714.54	-6,542.91	3,807.25	7,569.70	1.44	0.35	
12,134.00	93.78	149.28	4,710.60	-6,596.86	3,839.54	7,632.56	0.85	0.63	
12,197.00	94.09	148.31	4,706.28	-6,650.62	3,872.10	7,695.39	1.61	0.49	
12,261.00	94.26	148.75	4,701.62	-6,705.06	3,905.42	7,759.19	0.74	0.27	
12,325.00	94.31	148.31	4,696.84	-6,759.50	3,938.74	7,822.98	0.69	0.08	

Cathedral Energy Services

Survey Report

Company: Juniper Resources Exploration CO
Project: NEW MEXICO
Site: S16-T24N-R10W
Well: PINON UNIT 306H
Wellbore: OH
Design: FINAL

Local Co-ordinate Reference: Well PINON UNIT 306H
TVD Reference: 14' @ 6748.00usft (TBD)
MD Reference: 14' @ 6748.00usft (TBD)
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Database: USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
12,388.00	94.97	148.22	4,691.74	-6,812.90	3,971.77	7,885.74	1.06	1.05	
12,452.00	95.49	147.08	4,685.91	-6,866.74	4,005.87	7,949.40	1.95	0.81	
12,516.00	96.55	146.82	4,679.20	-6,920.09	4,040.58	8,012.94	1.70	1.66	LAST SURVEY - 12,516' MD
12,571.00	96.55	146.82	4,672.92	-6,965.82	4,070.48	8,067.48	0.00	0.00	PTB - 12,571' MD (449' FNL, 689' FEL)

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Pinon Unit 306H PBHL	0.00	0.00	4,774.08	-7,742.13	4,414.05	1,924,192.84	2,705,288.83	36.288153	-107.893742
- actual wellpath misses target center by 854.94usft at 12571.00usft MD (4672.92 TVD, -6965.82 N, 4070.48 E)									
- Point									
testing	0.00	360.00	0.00	-9,120.24	4,763.50	1,922,814.73	2,705,638.28	36.284368	-107.892553
- actual wellpath misses target center by 5192.11usft at 12571.00usft MD (4672.92 TVD, -6965.82 N, 4070.48 E)									
- Point									
PU 306H PBHL P3	0.00	0.00	4,712.70	-7,742.13	4,414.05	1,924,192.84	2,705,288.83	36.288153	-107.893742
- actual wellpath misses target center by 849.87usft at 12571.00usft MD (4672.92 TVD, -6965.82 N, 4070.48 E)									
- Point									

Design Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
12,516.00	4,679.20	-6,920.09	4,040.58	LAST SURVEY - 12,516' MD
12,571.00	4,672.92	-6,965.82	4,070.48	PTB - 12,571' MD (449' FNL, 689' FEL)

Checked By: _____ Approved By: _____ Date: _____