

DISTRICT I
1625 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) 334-8178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3480 Fax: (505) 476-3482

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.
Santa Fe, NM 87505

NMOC

MAY 30 2018

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AS DRILLED PLAT

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35559	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 6784	⁵ Property Name ALLISON UNIT	⁶ Well Number 152H
⁷ OGRID No. 372171	⁸ Operator Name HILCORP ENERGY COMPANY	⁹ Elevation 6155'

¹⁰ Surface Location

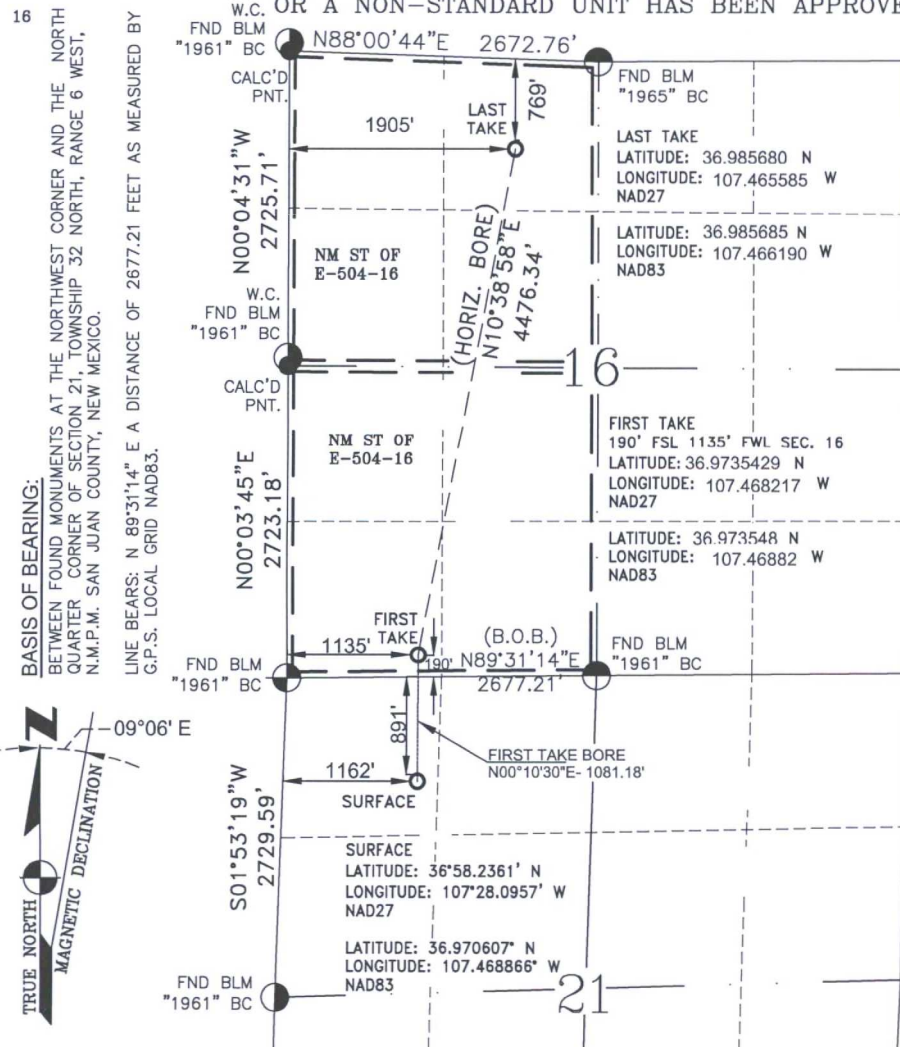
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	21	32-N	6-W		891'	NORTH	1162	WEST	SAN JUAN

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
C	16	32-N	6-W		769'	NORTH	1905'	WEST	SAN JUAN

¹² Dedicated Acres FC 320.00 ACRES W/2 SEC. 16	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

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



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 a working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Priscilla Shorty 5/29/18
Signature Date

Priscilla Shorty

Printed Name

pshorty@hilcorp.com

E-mail Address

18 SURVEYOR CERTIFICATION

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

Original C102 Attached

AY

12

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 478-3460 Fax: (505) 478-3462

1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-35559	² Pool Code 71629	³ Pool Name BASIN FRUITLAND COAL
⁴ Property Code 6784	⁵ Property Name ALLISON UNIT	⁶ Well Number 152H
⁷ GRID No. 372171	⁸ Operator Name HILCORP ENERGY COMPANY	⁹ Elevation 6155'

¹⁰ Surface Location

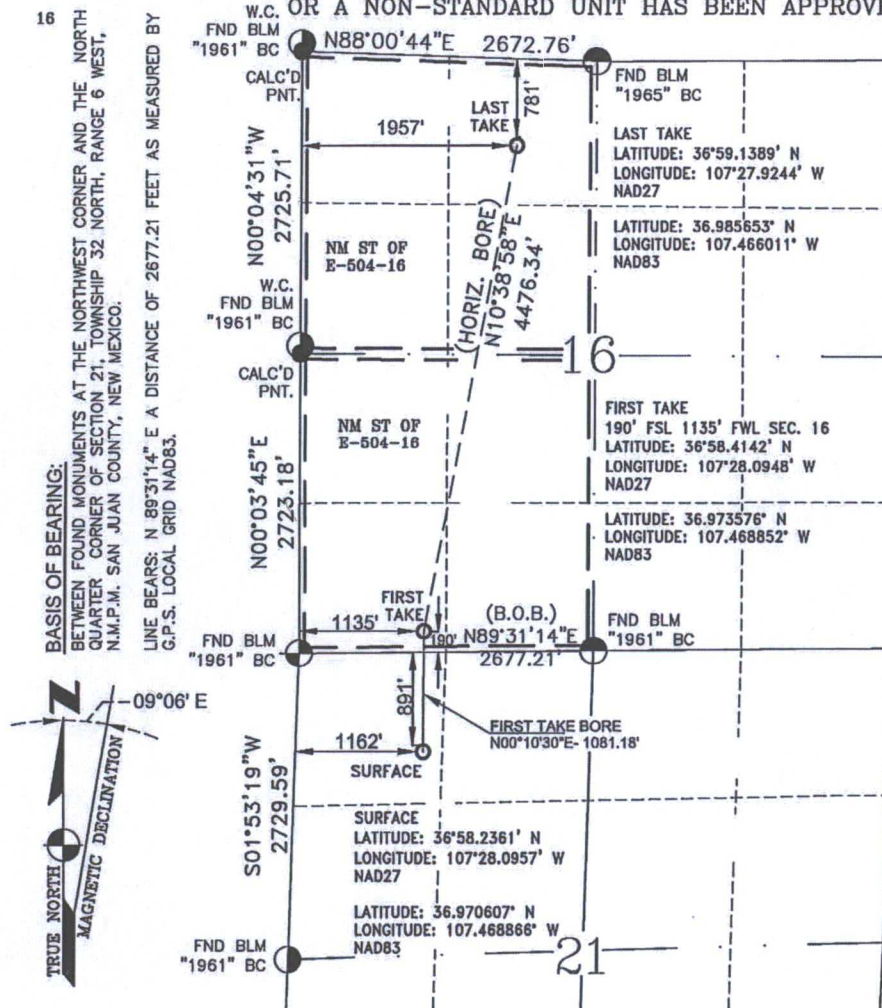
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	21	32-N	6-W		891'	NORTH	1162	WEST	SAN JUAN

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
C	16	32-N	6-W		781'	NORTH	1957'	WEST	SAN JUAN

¹² Dedicated Acres FC 320.00 ACRES W/2 SEC. 16	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
---	-------------------------------	----------------------------------	-------------------------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
w.c. 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 organisation 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 compulsory pooling order heretofore entered by the division.

Signature Priscilla Shorty Date 2/12/18
 Printed Name Priscilla Shorty
 E-mail Address pshorty@hilcorp.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.

FEBRUARY 9, 2018

Date of Survey _____

Signature and Seal of Professional Surveyor:



GLEN W. RUSSELL
Certificate Number

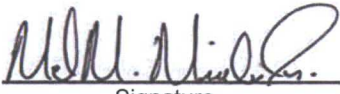


Directional Survey Certification

2948 I-70 Business Loop
Grand Junction, CO 81504
(970)-245-9447 Fax (970)-245-9454

Operator	<u>HilCorp Energy</u>
Well Name & No.	<u>Allison Unit Com 152H Lateral</u>
County & State	<u>San Juan, NM</u>
SDI Job No.	<u>OP.010370</u>
Rig	<u>Aztec 777</u>

I, Mel Mireles Jr., having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 3176 feet to a measured depth of 7,716 feet is true and correct as determined from all available records.


Signature

29-May-18
Date

Mel Mireles Jr.
Grand Junction Assistant Well Planner
Scientific Drilling - Colorado District

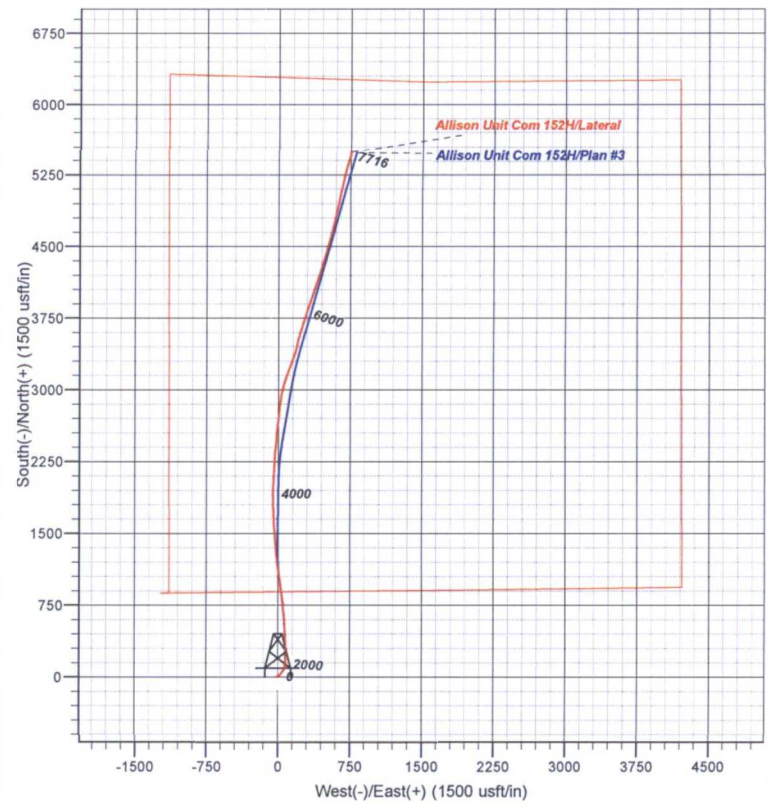
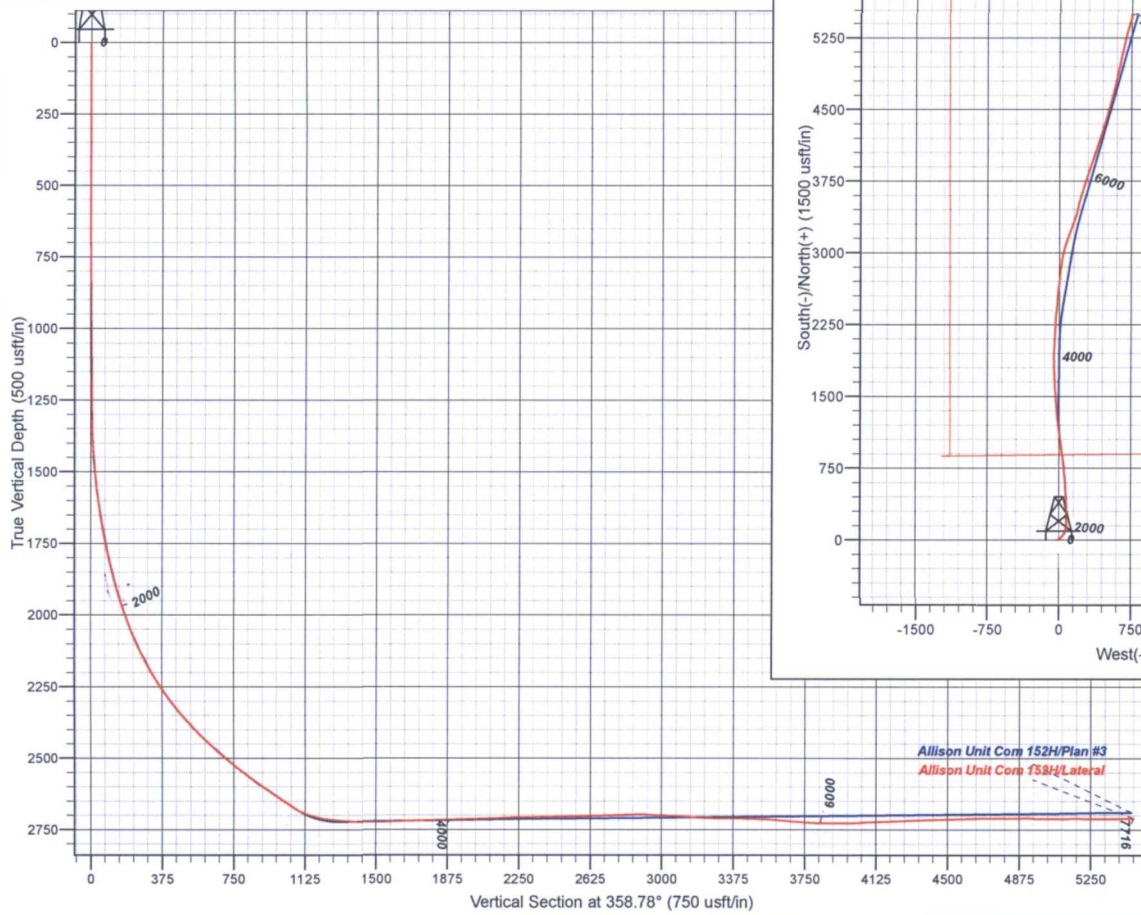


Company Name: Hilcorp Energy Corp.
Project: San Juan, NM NAD27
Site: Allison Unit Com 152H
Well: Allison Unit Com 152H
Wellbore: Lateral



WELL DETAILS: Allison Unit Com 152H

+N/-S	+E/-W	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777) 6155.00	North	East	Lat	Long
0.00	0.00		2172771.27	606647.72	36.9706017	-107.4682617



Design: Lateral (Allison Unit Com 152H/Lateral)
Created By: Mel Mireles Jr Date: 9:36, May 29 2018

PROJECT DETAILS: San Juan, NM NAD27
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico West 3003
System Datum: Mean Sea Level
Local North: Grid



Scientific Drilling, Intl Survey Report

Company:	Hilcorp Energy Corp.	Local Co-ordinate Reference:	Well Allison Unit Com 152H
Project:	San Juan, NM NAD27	TVD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Site:	Allison Unit Com 152H	MD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Well:	Allison Unit Com 152H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

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

Site	Allison Unit Com 152H			
Site Position:		Northing:	2,172,771.27 usft	Latitude: 36.9706016
From:	Map	Easting:	606,647.72 usft	Longitude: -107.4682617
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in	Grid Convergence: 0.22 °

Well	Allison Unit Com 152H			
Well Position	+N/-S	0.00 usft	Northing:	2,172,771.27 usft
	+E/-W	0.00 usft	Easting:	606,647.72 usft
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft
			Ground Level:	6,155.00 usft

Wellbore	Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	5/15/2018	9.02	63.52	49,964

Design	Lateral			
Audit Notes:				
Version:	1.0	Phase:	ACTUAL	Tie On Depth: 3,176.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	358.78

Survey Program	Date	5/29/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
527.00	3,176.00	Survey #1 - MWD Survey (Pilot)	MWD+HDGM	OWSG MWD + HDGM
3,225.00	7,716.00	Survey #1 - MWD Survey (Lateral)	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 (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
527.00	0.00	0.00	527.00	0.00	0.00	0.00	0.00	0.00	0.00
567.00	3.71	264.13	566.97	-0.13	-1.29	-0.10	9.28	9.28	0.00
598.00	3.81	266.97	597.91	-0.29	-3.31	-0.22	0.68	0.32	9.16
659.00	3.49	298.87	658.79	0.50	-6.96	0.65	3.33	-0.52	52.30
722.00	1.48	322.65	721.73	2.07	-9.14	2.27	3.52	-3.19	37.75
785.00	0.74	22.61	784.72	3.10	-9.47	3.30	2.03	-1.17	95.17
848.00	0.69	53.73	847.71	3.70	-9.01	3.89	0.61	-0.08	49.40
910.00	0.88	52.75	909.71	4.20	-8.33	4.38	0.31	0.31	-1.58
973.00	0.87	47.11	972.70	4.82	-7.60	4.98	0.14	-0.02	-8.95



Scientific Drilling, Intl Survey Report

Company:	Hilcorp Energy Corp.	Local Co-ordinate Reference:	Well Allison Unit Com 152H
Project:	San Juan, NM NAD27	TVD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Site:	Allison Unit Com 152H	MD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Well:	Allison Unit Com 152H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,036.00	0.72	37.10	1,035.69	5.46	-7.01	5.61	0.32	-0.24	-15.89
1,098.00	0.66	44.15	1,097.69	6.03	-6.52	6.17	0.17	-0.10	11.37
1,161.00	0.81	40.55	1,160.68	6.63	-5.98	6.76	0.25	0.24	-5.71
1,224.00	0.74	55.36	1,223.68	7.20	-5.36	7.31	0.34	-0.11	23.51
1,287.00	2.85	77.62	1,286.64	7.77	-3.49	7.84	3.47	3.35	35.33
1,350.00	6.31	66.58	1,349.43	9.48	1.22	9.45	5.64	5.49	-17.52
1,413.00	9.17	57.83	1,411.85	13.53	8.64	13.34	4.90	4.54	-13.89
1,476.00	11.57	50.34	1,473.82	20.23	17.76	19.85	4.36	3.81	-11.89
1,539.00	13.61	45.80	1,535.31	29.44	27.94	28.83	3.60	3.24	-7.21
1,601.00	15.58	39.78	1,595.31	40.92	38.50	40.09	4.01	3.18	-9.71
1,663.00	17.20	33.96	1,654.79	54.93	48.95	53.87	3.72	2.61	-9.39
1,724.00	18.00	29.14	1,712.94	70.64	58.57	69.37	2.72	1.31	-7.90
1,785.00	18.87	22.11	1,770.81	88.01	66.88	86.57	3.91	1.43	-11.52
1,846.00	20.25	13.33	1,828.30	107.43	73.03	105.85	5.32	2.26	-14.39
1,908.00	22.42	6.78	1,886.06	129.62	76.90	127.95	5.19	3.50	-10.56
1,969.00	25.39	3.86	1,941.82	154.22	79.15	152.50	5.24	4.87	-4.79
2,030.00	28.21	3.40	1,996.27	181.67	80.89	179.90	4.64	4.62	-0.75
2,092.00	31.27	1.94	2,050.09	212.39	82.30	210.58	5.07	4.94	-2.35
2,153.00	34.69	359.33	2,101.26	245.58	82.63	243.76	6.07	5.61	-4.28
2,214.00	37.70	357.92	2,150.48	281.58	81.75	279.78	5.12	4.93	-2.31
2,275.00	40.86	356.83	2,197.69	320.16	79.97	318.38	5.30	5.18	-1.79
2,337.00	44.20	357.33	2,243.38	362.01	77.84	360.26	5.41	5.39	0.81
2,398.00	47.57	357.74	2,285.83	405.75	75.96	404.04	5.55	5.52	0.67
2,459.00	50.22	358.50	2,325.93	451.69	74.46	450.00	4.44	4.34	1.25
2,521.00	52.70	357.43	2,364.56	500.15	72.73	498.48	4.22	4.00	-1.73
2,583.00	55.17	356.23	2,401.06	550.18	69.95	548.56	4.28	3.98	-1.94
2,646.00	57.60	355.41	2,435.93	602.50	66.13	600.95	4.01	3.86	-1.30
2,709.00	59.22	354.89	2,468.94	655.97	61.59	654.51	2.67	2.57	-0.83
2,772.00	60.71	354.18	2,500.47	710.26	56.39	708.90	2.56	2.37	-1.13
2,835.00	61.55	353.73	2,530.89	765.12	50.58	763.87	1.47	1.33	-0.71
2,898.00	63.18	353.17	2,560.11	820.57	44.21	819.44	2.70	2.59	-0.89
2,960.00	64.75	352.71	2,587.32	875.86	37.36	874.86	2.62	2.53	-0.74
3,023.00	65.68	352.25	2,613.73	932.56	29.88	931.71	1.62	1.48	-0.73
3,086.00	65.87	351.45	2,639.58	989.43	21.73	988.74	1.20	0.30	-1.27
3,149.00	66.54	350.90	2,665.00	1,046.39	12.89	1,045.88	1.33	1.06	-0.87
3,176.00	66.73	350.62	2,675.71	1,070.86	8.91	1,070.42	1.18	0.70	-1.03
3,225.00	73.65	352.21	2,692.30	1,116.41	2.04	1,116.11	14.45	14.13	3.24
3,288.00	80.62	351.93	2,706.32	1,177.21	-6.43	1,177.08	11.07	11.06	-0.44
3,319.00	82.54	352.13	2,710.86	1,207.57	-10.68	1,207.53	6.23	6.19	0.65
3,382.00	86.27	353.63	2,717.00	1,269.78	-18.45	1,269.88	6.38	5.92	2.38
3,445.00	88.35	355.25	2,719.96	1,332.41	-24.54	1,332.63	4.18	3.30	2.57
3,507.00	88.29	355.13	2,721.78	1,394.16	-29.74	1,394.48	0.22	-0.10	-0.19
3,570.00	89.13	356.47	2,723.20	1,456.97	-34.35	1,457.38	2.51	1.33	2.13



Scientific Drilling, Intl Survey Report

Company:	Hilcorp Energy Corp.	Local Co-ordinate Reference:	Well Allison Unit Com 152H
Project:	San Juan, NM NAD27	TVD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Site:	Allison Unit Com 152H	MD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Well:	Allison Unit Com 152H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,633.00	91.24	357.01	2,722.99	1,519.87	-37.93	1,520.33	3.46	3.35	0.86
3,696.00	91.64	357.30	2,721.41	1,582.77	-41.06	1,583.29	0.78	0.63	0.46
3,759.00	91.11	357.17	2,719.90	1,645.68	-44.10	1,646.25	0.87	-0.84	-0.21
3,822.00	90.27	357.92	2,719.14	1,708.62	-46.80	1,709.23	1.79	-1.33	1.19
3,885.00	90.87	357.05	2,718.51	1,771.55	-49.56	1,772.21	1.68	0.95	-1.38
3,948.00	92.35	357.91	2,716.74	1,834.46	-52.33	1,835.16	2.72	2.35	1.37
4,010.00	91.48	0.56	2,714.67	1,896.42	-53.16	1,897.12	4.50	-1.40	4.27
4,073.00	91.75	2.06	2,712.89	1,959.37	-51.72	1,960.03	2.42	0.43	2.38
4,136.00	90.44	2.77	2,711.69	2,022.30	-49.06	2,022.89	2.37	-2.08	1.13
4,138.55	90.45	2.78	2,711.67	2,024.85	-48.94	2,025.43	0.83	0.59	0.59
152H T1									
4,199.00	90.81	3.14	2,711.00	2,085.22	-45.81	2,085.72	0.83	0.59	0.59
4,262.00	91.78	2.77	2,709.58	2,148.12	-42.57	2,148.54	1.65	1.54	-0.59
4,325.00	91.34	2.83	2,707.86	2,211.02	-39.49	2,211.36	0.70	-0.70	0.10
4,387.00	90.20	3.24	2,707.03	2,272.92	-36.21	2,273.18	1.95	-1.84	0.66
4,450.00	90.81	4.83	2,706.48	2,335.76	-31.78	2,335.91	2.70	0.97	2.52
4,513.00	90.97	4.69	2,705.50	2,398.54	-26.55	2,398.56	0.34	0.25	-0.22
4,576.00	90.34	4.94	2,704.78	2,461.31	-21.26	2,461.20	1.08	-1.00	0.40
4,639.00	90.81	5.29	2,704.15	2,524.06	-15.64	2,523.82	0.93	0.75	0.56
4,702.00	91.18	5.99	2,703.05	2,586.74	-9.45	2,586.36	1.26	0.59	1.11
4,765.00	90.64	5.96	2,702.05	2,649.39	-2.90	2,648.85	0.86	-0.86	-0.05
4,827.00	91.51	5.56	2,700.89	2,711.07	3.32	2,710.38	1.54	1.40	-0.65
4,890.00	92.18	5.59	2,698.86	2,773.74	9.44	2,772.90	1.06	1.06	0.05
4,953.00	90.37	7.45	2,697.46	2,836.31	16.59	2,835.31	4.12	-2.87	2.95
5,016.00	89.10	9.10	2,697.75	2,898.65	25.66	2,897.44	3.30	-2.02	2.62
5,079.00	88.02	11.50	2,699.33	2,960.61	36.92	2,959.15	4.18	-1.71	3.81
5,141.00	87.92	14.33	2,701.53	3,020.99	50.77	3,019.23	4.56	-0.16	4.56
5,190.79	88.16	16.68	2,703.23	3,068.94	64.07	3,066.88	4.74	0.48	4.71
152H T2									
5,204.00	88.22	17.30	2,703.65	3,081.57	67.92	3,079.42	4.74	0.48	4.71
5,267.00	86.91	18.49	2,706.33	3,141.46	87.26	3,138.89	2.81	-2.08	1.89
5,330.00	88.69	20.49	2,708.75	3,200.81	108.27	3,197.77	4.25	2.83	3.17
5,393.00	89.36	21.45	2,709.82	3,259.62	130.81	3,256.09	1.86	1.06	1.52
5,456.00	89.56	21.43	2,710.41	3,318.26	153.84	3,314.23	0.32	0.32	-0.03
5,517.00	89.87	17.02	2,710.72	3,375.84	173.92	3,371.37	7.25	0.51	-7.23
5,579.00	89.06	12.46	2,711.29	3,435.78	189.69	3,430.96	7.47	-1.31	-7.35
5,640.00	88.32	12.19	2,712.69	3,495.36	202.71	3,490.25	1.29	-1.21	-0.44
5,701.00	87.48	15.24	2,714.93	3,554.58	217.16	3,549.14	5.18	-1.38	5.00
5,762.00	88.26	16.51	2,717.19	3,613.21	233.83	3,607.40	2.44	1.28	2.08
5,824.00	86.33	18.43	2,720.12	3,672.28	252.42	3,666.06	4.39	-3.11	3.10
5,885.00	87.01	17.54	2,723.66	3,730.20	271.22	3,723.56	1.83	1.11	-1.46
5,946.00	88.25	18.60	2,726.18	3,788.14	290.13	3,781.09	2.67	2.03	1.74
6,008.00	89.73	18.44	2,727.28	3,846.92	309.82	3,839.43	2.40	2.39	-0.26
6,069.00	89.76	18.71	2,727.55	3,904.74	329.25	3,896.83	0.45	0.05	0.44



Scientific Drilling, Intl Survey Report

Company:	Hilcorp Energy Corp.	Local Co-ordinate Reference:	Well Allison Unit Com 152H
Project:	San Juan, NM NAD27	TVD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Site:	Allison Unit Com 152H	MD Reference:	GL 6155' & RKB 15' @ 6170.00usft (Aztec 777)
Well:	Allison Unit Com 152H	North Reference:	Grid
Wellbore:	Lateral	Survey Calculation Method:	Minimum Curvature
Design:	Lateral	Database:	Grand Junction District

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,130.00	90.37	19.41	2,727.48	3,962.39	349.17	3,954.04	1.52	1.00	1.15
6,191.00	91.34	18.84	2,726.57	4,020.02	369.15	4,011.23	1.84	1.59	-0.93
6,253.00	91.88	18.98	2,724.83	4,078.65	389.23	4,069.42	0.90	0.87	0.23
6,314.00	90.75	18.20	2,723.43	4,136.45	408.68	4,126.79	2.25	-1.85	-1.28
6,375.00	91.28	17.78	2,722.35	4,194.46	427.51	4,184.39	1.11	0.87	-0.69
6,436.00	92.69	17.01	2,720.23	4,252.63	445.74	4,242.16	2.63	2.31	-1.26
6,498.00	90.67	16.79	2,718.42	4,311.92	463.75	4,301.05	3.28	-3.26	-0.35
6,559.00	90.81	16.13	2,717.63	4,370.42	481.03	4,359.17	1.11	0.23	-1.08
6,620.00	91.51	16.19	2,716.39	4,429.00	498.01	4,417.37	1.15	1.15	0.10
6,682.00	92.25	16.81	2,714.36	4,488.41	515.61	4,476.39	1.56	1.19	1.00
6,743.00	91.14	16.64	2,712.56	4,546.80	533.15	4,534.40	1.84	-1.82	-0.28
6,804.00	90.13	14.76	2,711.88	4,605.52	549.66	4,592.75	3.50	-1.66	-3.08
6,866.00	90.17	14.20	2,711.72	4,665.55	565.16	4,652.44	0.91	0.06	-0.90
6,927.00	89.80	13.61	2,711.73	4,724.76	579.82	4,711.32	1.14	-0.61	-0.97
6,988.00	90.24	13.54	2,711.71	4,784.06	594.14	4,770.30	0.73	0.72	-0.11
7,051.00	91.04	12.87	2,711.01	4,845.39	608.53	4,831.31	1.66	1.27	-1.06
7,114.00	90.17	13.03	2,710.34	4,906.78	622.65	4,892.39	1.40	-1.38	0.25
7,177.00	88.76	11.61	2,710.93	4,968.33	636.09	4,953.63	3.18	-2.24	-2.25
7,240.00	89.43	11.74	2,711.93	5,030.01	648.83	5,015.03	1.08	1.06	0.21
7,302.00	90.17	11.65	2,712.14	5,090.73	661.40	5,075.46	1.20	1.19	-0.15
7,365.00	90.81	11.49	2,711.60	5,152.44	674.04	5,136.90	1.05	1.02	-0.25
7,428.00	89.60	13.31	2,711.38	5,213.97	687.56	5,198.12	3.47	-1.92	2.89
7,491.00	89.03	14.76	2,712.13	5,275.08	702.84	5,258.89	2.47	-0.90	2.30
7,554.00	90.07	14.88	2,712.63	5,335.98	718.95	5,319.44	1.66	1.65	0.19
7,617.00	90.91	15.21	2,712.09	5,396.82	735.31	5,379.91	1.43	1.33	0.52
7,648.00	91.21	14.88	2,711.51	5,426.75	743.35	5,409.67	1.44	0.97	-1.06
7,716.00	91.21	14.88	2,710.08	5,492.46	760.81	5,474.99	0.00	0.00	0.00
152H BHL									

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------

Well Name: ALLISON UNIT #152H

Operator HILCORP SAN JUAN, L.P.	Legal WellName ALLISON UNIT #152H	API / UWI 3004535559	County San Juan	State/Province New Mexico
Surface Legal Location 021-032N-006W-D	North/South Distance (ft) 891.0	N/S Ref FNL	East/West Distance (ft) 1,162.0	E/W Ref FWL
Date	Description INCLINATION SURVEY			

Survey Data

Date	MD (ftKB)	Incl (")	Azm (")	Method	Survey Company
------	-----------	----------	---------	--------	----------------

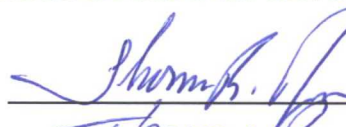
Date
5/29/2018

Description
DIRECTIONAL SURVEY

Survey Data

Date	MD (ftKB)	Incl (")	Azm (")	Method	Survey Company
5/29/2018	0.00	0.00	0.00	IncAzi-MWD	Scientific Drilling
5/29/2018	527.00	0.00	0.00	IncAzi-MWD	Scientific Drilling
5/29/2018	567.00	3.71	264.13	IncAzi-MWD	Scientific Drilling
5/29/2018	598.00	3.81	266.97	IncAzi-MWD	Scientific Drilling
5/29/2018	659.00	3.49	298.87	IncAzi-MWD	Scientific Drilling
5/29/2018	722.00	1.48	322.65	IncAzi-MWD	Scientific Drilling
5/29/2018	785.00	0.74	22.61	IncAzi-MWD	Scientific Drilling
5/29/2018	848.00	0.69	53.73	IncAzi-MWD	Scientific Drilling
5/29/2018	910.00	0.88	52.75	IncAzi-MWD	Scientific Drilling
5/29/2018	973.00	0.87	47.11	IncAzi-MWD	Scientific Drilling
5/29/2018	1,036.00	0.72	37.10	IncAzi-MWD	Scientific Drilling
5/29/2018	1,098.00	0.66	44.15	IncAzi-MWD	Scientific Drilling
5/29/2018	1,161.00	0.81	40.55	IncAzi-MWD	Scientific Drilling
5/29/2018	1,224.00	0.74	55.36	IncAzi-MWD	Scientific Drilling
5/29/2018	1,287.00	2.85	77.62	IncAzi-MWD	Scientific Drilling
5/29/2018	1,350.00	6.31	66.58	IncAzi-MWD	Scientific Drilling
5/29/2018	1,413.00	9.17	57.83	IncAzi-MWD	Scientific Drilling
5/29/2018	1,476.00	11.57	50.34	IncAzi-MWD	Scientific Drilling
5/29/2018	1,539.00	13.61	45.80	IncAzi-MWD	Scientific Drilling
5/29/2018	1,601.00	15.58	39.78	IncAzi-MWD	Scientific Drilling
5/29/2018	1,663.00	17.20	33.96	IncAzi-MWD	Scientific Drilling
5/29/2018	1,724.00	18.00	29.14	IncAzi-MWD	Scientific Drilling
5/29/2018	1,785.00	18.87	22.11	IncAzi-MWD	Scientific Drilling
5/29/2018	1,846.00	20.25	13.33	IncAzi-MWD	Scientific Drilling
5/29/2018	1,908.00	22.42	6.78	IncAzi-MWD	Scientific Drilling
5/29/2018	1,969.00	25.39	3.86	IncAzi-MWD	Scientific Drilling
5/29/2018	2,030.00	28.21	3.40	IncAzi-MWD	Scientific Drilling
5/29/2018	2,092.00	31.27	1.94	IncAzi-MWD	Scientific Drilling
5/29/2018	2,153.00	34.69	359.33	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as Operations Manager for Hilcorp Energy Company, am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.


Thomas R. Jacques

Subscribed and sworn to me this May 29, 2018


Melissa K. Spencer

Notary Public in and for San Juan County, New Mexico

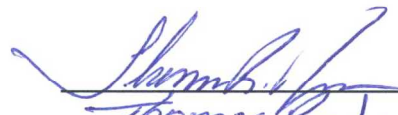
My Commission expires Nov. 04, 2019



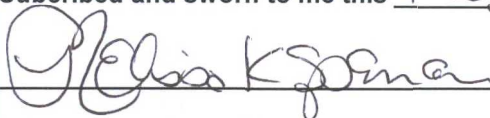
Well Name: ALLISON UNIT #152H

Survey Data					
Date	MD (ftKB)	Incl (°)	Azm (°)	Method	Survey Company
5/29/2018	2,214.00	37.70	357.92	IncAzi-MWD	Scientific Drilling
5/29/2018	2,275.00	40.86	356.83	IncAzi-MWD	Scientific Drilling
5/29/2018	2,337.00	44.20	357.33	IncAzi-MWD	Scientific Drilling
5/29/2018	2,398.00	47.57	357.74	IncAzi-MWD	Scientific Drilling
5/29/2018	2,459.00	50.22	358.50	IncAzi-MWD	Scientific Drilling
5/29/2018	2,521.00	52.70	357.43	IncAzi-MWD	Scientific Drilling
5/29/2018	2,583.00	55.17	356.23	IncAzi-MWD	Scientific Drilling
5/29/2018	2,646.00	57.60	355.41	IncAzi-MWD	Scientific Drilling
5/29/2018	2,709.00	59.22	354.89	IncAzi-MWD	Scientific Drilling
5/29/2018	2,772.00	60.71	354.18	IncAzi-MWD	Scientific Drilling
5/29/2018	2,835.00	61.55	353.73	IncAzi-MWD	Scientific Drilling
5/29/2018	2,898.00	63.18	353.17	IncAzi-MWD	Scientific Drilling
5/29/2018	2,960.00	64.75	352.71	IncAzi-MWD	Scientific Drilling
5/29/2018	3,023.00	65.68	352.25	IncAzi-MWD	Scientific Drilling
5/29/2018	3,086.00	65.87	351.45	IncAzi-MWD	Scientific Drilling
5/29/2018	3,149.00	66.54	350.90	IncAzi-MWD	Scientific Drilling
5/29/2018	3,176.00	66.73	350.62	IncAzi-MWD	Scientific Drilling
5/29/2018	3,225.00	73.65	352.21	IncAzi-MWD	Scientific Drilling
5/29/2018	3,288.00	80.62	351.93	IncAzi-MWD	Scientific Drilling
5/29/2018	3,319.00	82.54	352.13	IncAzi-MWD	Scientific Drilling
5/29/2018	3,382.00	86.27	353.63	IncAzi-MWD	Scientific Drilling
5/29/2018	3,445.00	88.35	355.25	IncAzi-MWD	Scientific Drilling
5/29/2018	3,507.00	88.29	355.13	IncAzi-MWD	Scientific Drilling
5/29/2018	3,570.00	89.13	356.47	IncAzi-MWD	Scientific Drilling
5/29/2018	3,633.00	91.24	357.01	IncAzi-MWD	Scientific Drilling
5/29/2018	3,696.00	91.64	357.30	IncAzi-MWD	Scientific Drilling
5/29/2018	3,759.00	91.11	357.17	IncAzi-MWD	Scientific Drilling
5/29/2018	3,822.00	90.27	357.92	IncAzi-MWD	Scientific Drilling
5/29/2018	3,885.00	90.87	357.05	IncAzi-MWD	Scientific Drilling
5/29/2018	3,948.00	92.35	357.91	IncAzi-MWD	Scientific Drilling
5/29/2018	4,010.00	91.48	0.56	IncAzi-MWD	Scientific Drilling
5/29/2018	4,073.00	91.75	2.06	IncAzi-MWD	Scientific Drilling
5/29/2018	4,136.00	90.44	2.77	IncAzi-MWD	Scientific Drilling
5/29/2018	4,199.00	90.81	3.14	IncAzi-MWD	Scientific Drilling
5/29/2018	4,262.00	91.78	2.77	IncAzi-MWD	Scientific Drilling
5/29/2018	4,325.00	91.34	2.83	IncAzi-MWD	Scientific Drilling
5/29/2018	4,387.00	90.20	3.24	IncAzi-MWD	Scientific Drilling
5/29/2018	4,450.00	90.81	4.83	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as Operations Manager for Hilcorp Energy Company, am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.


Thomas R. Jacquet

Subscribed and sworn to me this May 29, 2018


Melissa K. Spencer

Notary Public in and for San Juan County, New Mexico

My Commission expires Nov. 04, 2019



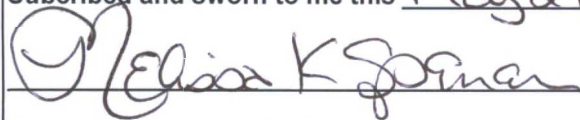
Well Name: ALLISON UNIT #152H

Survey Data					
Date	MD (ftKB)	Incl (°)	Azm (°)	Method	Survey Company
5/29/2018	4,513.00	90.97	4.69	IncAzi-MWD	Scientific Drilling
5/29/2018	4,576.00	90.34	4.94	IncAzi-MWD	Scientific Drilling
5/29/2018	4,639.00	90.81	5.29	IncAzi-MWD	Scientific Drilling
5/29/2018	4,702.00	91.18	5.99	IncAzi-MWD	Scientific Drilling
5/29/2018	4,765.00	90.64	5.96	IncAzi-MWD	Scientific Drilling
5/29/2018	4,827.00	91.51	5.56	IncAzi-MWD	Scientific Drilling
5/29/2018	4,890.00	92.18	5.59	IncAzi-MWD	Scientific Drilling
5/29/2018	4,953.00	90.37	7.45	IncAzi-MWD	Scientific Drilling
5/29/2018	5,016.00	89.10	9.10	IncAzi-MWD	Scientific Drilling
5/29/2018	5,079.00	88.02	11.50	IncAzi-MWD	Scientific Drilling
5/29/2018	5,141.00	87.92	14.33	IncAzi-MWD	Scientific Drilling
5/29/2018	5,204.00	88.22	17.30	IncAzi-MWD	Scientific Drilling
5/29/2018	5,267.00	86.91	18.49	IncAzi-MWD	Scientific Drilling
5/29/2018	5,330.00	88.69	20.49	IncAzi-MWD	Scientific Drilling
5/29/2018	5,393.00	89.36	21.45	IncAzi-MWD	Scientific Drilling
5/29/2018	5,456.00	89.56	21.43	IncAzi-MWD	Scientific Drilling
5/29/2018	5,517.00	89.87	17.02	IncAzi-MWD	Scientific Drilling
5/29/2018	5,579.00	89.06	12.46	IncAzi-MWD	Scientific Drilling
5/29/2018	5,640.00	88.32	12.19	IncAzi-MWD	Scientific Drilling
5/29/2018	5,701.00	87.48	15.24	IncAzi-MWD	Scientific Drilling
5/29/2018	5,762.00	88.26	16.51	IncAzi-MWD	Scientific Drilling
5/29/2018	5,824.00	86.33	18.43	IncAzi-MWD	Scientific Drilling
5/29/2018	5,885.00	87.01	17.54	IncAzi-MWD	Scientific Drilling
5/29/2018	5,946.00	88.25	18.60	IncAzi-MWD	Scientific Drilling
5/29/2018	6,008.00	89.73	18.44	IncAzi-MWD	Scientific Drilling
5/29/2018	6,069.00	89.76	18.71	IncAzi-MWD	Scientific Drilling
5/29/2018	6,130.00	90.37	19.41	IncAzi-MWD	Scientific Drilling
5/29/2018	6,191.00	91.34	18.84	IncAzi-MWD	Scientific Drilling
5/29/2018	6,253.00	91.88	18.98	IncAzi-MWD	Scientific Drilling
5/29/2018	6,314.00	90.75	18.20	IncAzi-MWD	Scientific Drilling
5/29/2018	6,375.00	91.28	17.78	IncAzi-MWD	Scientific Drilling
5/29/2018	6,436.00	92.69	17.01	IncAzi-MWD	Scientific Drilling
5/29/2018	6,498.00	90.67	16.79	IncAzi-MWD	Scientific Drilling
5/29/2018	6,559.00	90.81	16.13	IncAzi-MWD	Scientific Drilling
5/29/2018	6,620.00	91.51	16.19	IncAzi-MWD	Scientific Drilling
5/29/2018	6,682.00	92.25	16.81	IncAzi-MWD	Scientific Drilling
5/29/2018	6,743.00	91.14	16.64	IncAzi-MWD	Scientific Drilling
5/29/2018	6,804.00	90.13	14.76	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as Operations Manager for Hilcorp Energy Company, am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.


Thomas R. Seeger

Subscribed and sworn to me this May 29, 2018


Melissa K. Spencer

Notary Public in and for San Juan County, New Mexico

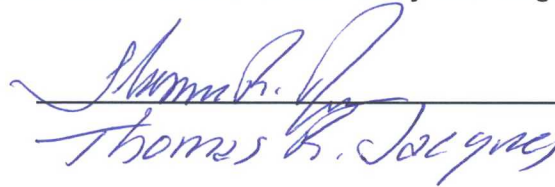
My Commission expires Nov. 04, 2019



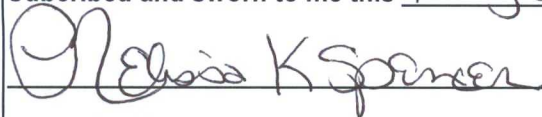
Well Name: ALLISON UNIT #152H

Survey Data					
Date	MD (ftKB)	Incl (°)	Azm (°)	Method	Survey Company
5/29/2018	6,866.00	90.17	14.20	IncAzi-MWD	Scientific Drilling
5/29/2018	6,927.00	89.80	13.61	IncAzi-MWD	Scientific Drilling
5/29/2018	6,988.00	90.24	13.54	IncAzi-MWD	Scientific Drilling
5/29/2018	7,051.00	91.04	12.87	IncAzi-MWD	Scientific Drilling
5/29/2018	7,114.00	90.17	13.03	IncAzi-MWD	Scientific Drilling
5/29/2018	7,177.00	88.76	11.61	IncAzi-MWD	Scientific Drilling
5/29/2018	7,240.00	89.43	11.74	IncAzi-MWD	Scientific Drilling
5/29/2018	7,302.00	90.17	11.65	IncAzi-MWD	Scientific Drilling
5/29/2018	7,365.00	90.81	11.49	IncAzi-MWD	Scientific Drilling
5/29/2018	7,428.00	89.60	13.31	IncAzi-MWD	Scientific Drilling
5/29/2018	7,491.00	89.03	14.76	IncAzi-MWD	Scientific Drilling
5/29/2018	7,554.00	90.07	14.88	IncAzi-MWD	Scientific Drilling
5/29/2018	7,617.00	90.91	15.21	IncAzi-MWD	Scientific Drilling
5/29/2018	7,648.00	91.21	14.88	IncAzi-MWD	Scientific Drilling
5/29/2018	7,716.00	91.21	14.88	IncAzi-MWD	Scientific Drilling

I, the undersigned, certify that I acting in my capacity as Operations Manager for Hilcorp Energy Company, am authorized by said Company to make this report; and that said report was prepared under my supervision and directions, and that the facts stated herein are true to the best of my knowledge and belief.


Thomas B. Jorgensen

Subscribed and sworn to me this May 29, 2018


Melissa K. Spencer

Notary Public in and for San Juan County, New Mexico

My Commission expires Nov. 04, 2019

