

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
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
1220 S. St. Francis Dr., Santa Fe, NM 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, 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 30-039-31229	² Pool Code 39189	³ Pool Name LINDRETH GALLUP-DAKOTA WEST
⁴ Property Code 301277	⁵ Property Name JICARILLA APACHE TRIBAL 125	⁶ Well Number #18
⁷ OGRID No. 143199	⁸ Operator Name ENERVEST OPERATING, LLC	⁹ Elevation 7116'

¹⁰Surface Location

UL or lot no. 0	Section 26	Township 25	Range 4	Lot Idn	Feet from the 895'	North/South line SOUTH	Feet from the 1874'	East/West line EAST	County RIO ARRIBA
--------------------	---------------	----------------	------------	---------	-----------------------	---------------------------	------------------------	------------------------	----------------------

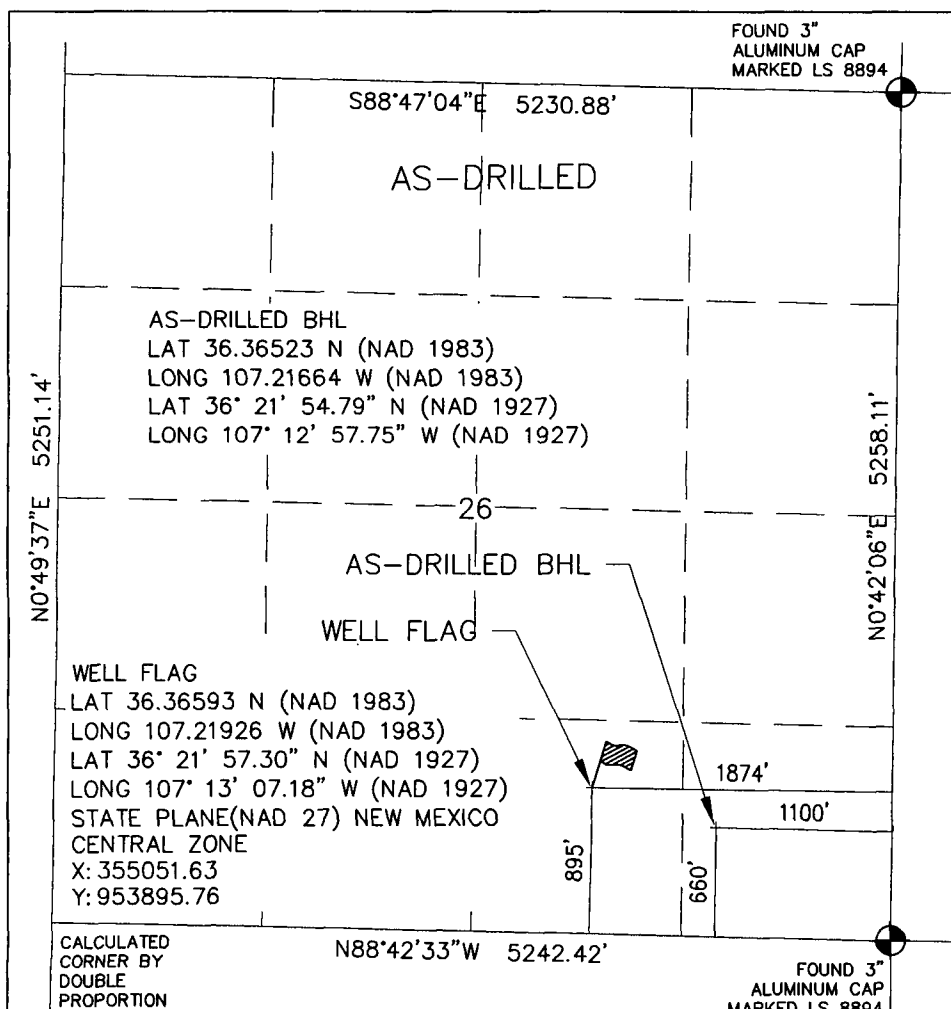
¹¹Bottom Hole Location If Different From Surface

UL or lot no. P	Section 26	Township 25	Range 4	Lot Idn	Feet from the 660'	North/South line SOUTH	Feet from the 1100'	East/West line EAST	County RIO ARRIBA
--------------------	---------------	----------------	------------	---------	-----------------------	---------------------------	------------------------	------------------------	----------------------

¹² Dedicated Acres —	¹³ Joint of Infill	¹⁴ Consolidation Code	¹⁵ Order No.
------------------------------------	-------------------------------	----------------------------------	-------------------------

POIN SEP 19 14
OIL CONS. DIV.
DIST. 3

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.



¹⁷OPERATOR 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.

Michelle Doerschler 9/19/2014
Signature Date
Michelle Doerschler
Printed Name
m.doerschler@enervest.com
E-mail Address

¹⁸SURVEYOR 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.

Survey Date: JANUARY 6, 2014
Signature and Seal of Professional Surveyor



Certificate Number 11643



Scientific Drilling

Directional Survey Certification

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

Operator	EnerVest Operating LLC.
Well Name & No.	Jicarilla Apache Tribal 125 #18
County & State	Rio Arriba, NM
SDI Job No.	330614DEF164723
Rig	D&J 2

I, Mel Mireles Jr., having personal knowledge of all the facts, hereby certify that the attached directional survey run from a measured depth of 0 feet to a measured depth of 8,073 feet is true and correct as determined from all available records.

Mel Mireles Jr.
Signature

27-Jun-14
Date

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

RCVD SEP 11 '14

OIL CONS. DIV.

DIST. 3

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla Apache 125 #18
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	GL 7116' & RKB 13' @ 7129.00ft
Site:	Jicarilla	MD Reference:	GL 7116' & RKB 13' @ 7129.00ft
Well:	Jicarilla Apache 125 #18	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Project	Rio Arriba County, NM (NAD83)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Central Zone		

Site		Jicarilla			
Site Position:		Northing:	-274,017,644.35 usft	Latitude:	7° 5' 24.101 S
From:	Lat/Long	Easting:	372,015,898.75 usft	Longitude:	42° 3' 21.841 E
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.00 °

Well	Jicarilla Apache 125 #18					
Well Position	+N/-S	0.00 ft	Northing:	1,953,898.82 usft	Latitude:	36° 21' 57.348 N
	+E/-W	0.00 ft	Easting:	1,355,052.80 usft	Longitude:	107° 13' 9.336 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	7,116.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2014	6/18/2014	9.33	63.18	50,208

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	108.20	

Survey Program	Date	6/27/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
638.00	8,073.00	Survey #1 - SDI MWD Survey (OH)	MWD SDI	MWD - Standard ver 1.0.1	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
638.00	0.56	298.67	637.99	1.50	-2.74	-3.07	0.09	0.09	0.00
639.00	0.52	299.87	638.99	1.50	-2.74	-3.08	4.41	-4.27	119.63
First SDI MWD Survey									
728.00	3.43	102.21	727.94	1.14	-0.49	-0.82	4.41	3.27	182.41
820.00	7.29	106.44	819.52	-1.10	7.80	7.75	4.21	4.20	4.60
911.00	7.39	104.96	909.78	-4.24	18.99	19.37	0.24	0.11	-1.63
1,002.00	7.86	103.58	999.97	-7.21	30.70	31.41	0.55	0.52	-1.52
1,096.00	9.35	105.54	1,092.91	-10.77	44.30	45.45	1.62	1.59	2.09
1,190.00	9.75	105.88	1,185.61	-14.99	59.31	61.03	0.43	0.43	0.36
1,283.00	9.85	107.60	1,277.25	-19.55	74.47	76.85	0.33	0.11	1.85

Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla Apache 125 #18
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	GL 7116' & RKB 13' @ 7129.00ft
Site:	Jicarilla	MD Reference:	GL 7116' & RKB 13' @ 7129.00ft
Well:	Jicarilla Apache 125 #18	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,378.00	9.70	107.13	1,370.87	-24.37	89.86	92.98	0.18	-0.16	-0.49
1,472.00	9.91	104.88	1,463.50	-28.78	105.25	108.97	0.46	0.22	-2.39
1,566.00	9.64	112.78	1,556.14	-33.90	120.32	124.89	1.45	-0.29	8.40
1,658.00	9.67	112.83	1,646.84	-39.88	134.55	140.27	0.03	0.03	0.05
1,753.00	9.45	113.42	1,740.52	-46.08	149.06	155.99	0.25	-0.23	0.62
1,845.00	8.79	108.47	1,831.36	-51.31	162.66	170.54	1.11	-0.72	-5.38
1,938.00	9.31	110.56	1,923.20	-56.20	176.44	185.17	0.66	0.56	2.25
2,033.00	8.52	108.67	2,017.05	-61.15	190.30	199.88	0.89	-0.83	-1.99
2,128.00	8.32	109.32	2,111.03	-65.68	203.45	213.79	0.23	-0.21	0.68
2,223.00	8.56	107.80	2,205.00	-70.11	216.67	227.73	0.34	0.25	-1.60
2,318.00	6.95	116.91	2,299.13	-74.88	228.53	240.48	2.13	-1.69	9.59
2,414.00	4.22	103.46	2,394.67	-78.33	237.15	249.75	3.13	-2.84	-14.01
2,508.00	5.89	100.13	2,488.30	-79.98	245.26	257.97	1.80	1.78	-3.54
2,602.00	6.46	113.80	2,581.76	-82.96	254.85	268.01	1.67	0.61	14.54
2,696.00	8.87	113.49	2,674.91	-87.99	266.33	280.49	2.56	2.56	-0.33
2,790.00	9.94	106.45	2,767.65	-93.17	280.76	295.82	1.67	1.14	-7.49
2,884.00	10.55	105.22	2,860.15	-97.73	296.85	312.52	0.69	0.65	-1.31
2,975.00	9.90	105.15	2,949.71	-101.96	312.44	328.65	0.71	-0.71	-0.08
3,070.00	10.02	103.46	3,043.27	-106.02	328.36	345.04	0.33	0.13	-1.78
3,163.00	10.04	102.56	3,134.85	-109.67	344.14	361.17	0.17	0.02	-0.97
3,258.00	9.47	108.71	3,228.48	-113.97	359.62	377.23	1.25	-0.60	6.47
3,350.00	8.56	107.02	3,319.34	-118.41	373.34	391.64	1.03	-0.99	-1.84
3,444.00	7.75	102.54	3,412.39	-121.83	386.21	404.94	1.09	-0.86	-4.77
3,539.00	9.28	105.81	3,506.34	-125.31	399.84	418.97	1.69	1.61	3.44
3,633.00	10.12	106.73	3,599.00	-129.75	415.04	434.80	0.91	0.89	0.98
3,727.00	8.58	105.36	3,691.75	-133.98	429.71	450.06	1.66	-1.64	-1.46
3,822.00	9.88	106.68	3,785.52	-138.20	444.35	465.29	1.39	1.37	1.39
3,917.00	10.55	109.92	3,879.01	-143.50	460.34	482.13	0.93	0.71	3.41
4,010.00	9.41	110.04	3,970.60	-149.01	475.48	498.24	1.23	-1.23	0.13
4,103.00	8.97	109.79	4,062.41	-154.07	489.45	513.08	0.48	-0.47	-0.27
4,194.00	8.00	106.98	4,152.41	-158.32	502.18	526.51	1.16	-1.07	-3.09
4,287.00	8.18	101.36	4,244.49	-161.51	514.86	539.55	0.87	0.19	-6.04
4,382.00	9.12	102.26	4,338.41	-164.44	528.84	553.74	1.00	0.99	0.95
4,476.00	10.20	107.33	4,431.07	-168.51	544.07	569.48	1.46	1.15	5.39
4,570.00	9.76	108.21	4,523.65	-173.48	559.58	585.77	0.50	-0.47	0.94
4,665.00	9.50	100.30	4,617.32	-177.39	574.94	601.58	1.42	-0.27	-8.33
4,761.00	9.60	93.28	4,711.99	-179.27	590.73	617.17	1.22	0.10	-7.31
4,856.00	9.93	90.17	4,805.61	-179.75	606.83	632.61	0.65	0.35	-3.27
4,951.00	10.67	110.50	4,899.11	-182.85	623.26	649.19	3.88	0.78	21.40
5,045.00	9.89	111.60	4,991.60	-188.87	638.92	665.95	0.86	-0.83	1.17
5,139.00	9.38	105.90	5,084.28	-193.94	653.79	681.66	1.15	-0.54	-6.06
5,232.00	9.66	108.45	5,176.00	-198.49	668.48	697.03	0.54	0.30	2.74
5,327.00	8.52	109.75	5,269.80	-203.39	682.67	712.04	1.22	-1.20	1.37

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla Apache 125 #18
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	GL 7116' & RKB 13' @ 7129.00ft
Site:	Jicarilla	MD Reference:	GL 7116' & RKB 13' @ 7129.00ft
Well:	Jicarilla Apache 125 #18	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	OH	Database:	Grand Junction District

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,422.00	10.27	109.38	5,363.53	-208.58	697.28	727.54	1.84	1.84	-0.39
5,514.00	8.79	107.64	5,454.25	-213.43	711.72	742.77	1.64	-1.61	-1.89
5,608.00	8.71	107.07	5,547.16	-217.69	725.37	757.07	0.13	-0.09	-0.61
5,702.00	6.86	104.61	5,640.29	-221.20	737.60	769.79	2.00	-1.97	-2.62
5,796.00	6.48	105.24	5,733.65	-224.01	748.15	780.69	0.41	-0.40	0.67
5,889.00	5.28	106.10	5,826.16	-226.58	757.33	790.21	1.29	-1.29	0.92
5,983.00	5.18	111.55	5,919.77	-229.33	765.43	798.77	0.54	-0.11	5.80
6,077.00	3.52	118.32	6,013.50	-232.26	771.92	805.84	1.85	-1.77	7.20
6,169.00	2.11	95.55	6,105.39	-233.76	776.09	810.28	1.93	-1.53	-24.75
6,264.00	0.69	59.07	6,200.36	-233.64	778.32	812.36	1.69	-1.49	-38.40
6,358.00	0.59	41.57	6,294.35	-232.99	779.13	812.92	0.23	-0.11	-18.62
6,453.00	0.48	33.57	6,389.35	-232.29	779.67	813.22	0.14	-0.12	-8.42
6,546.00	0.34	41.07	6,482.35	-231.76	780.07	813.43	0.16	-0.15	8.06
6,638.00	0.14	162.10	6,574.34	-231.66	780.28	813.60	0.47	-0.22	131.55
6,732.00	0.27	209.50	6,668.34	-231.96	780.21	813.63	0.22	0.14	50.43
6,826.00	0.51	195.98	6,762.34	-232.56	779.99	813.60	0.27	0.26	-14.38
6,921.00	0.62	182.28	6,857.34	-233.48	779.85	813.76	0.18	0.12	-14.42
7,016.00	1.18	193.79	6,952.33	-234.94	779.60	813.97	0.62	0.59	12.12
7,109.00	0.97	191.09	7,045.31	-236.64	779.22	814.14	0.23	-0.23	-2.90
7,204.00	1.01	205.15	7,140.29	-238.19	778.71	814.14	0.26	0.04	14.80
7,298.00	0.79	209.99	7,234.28	-239.50	778.03	813.91	0.25	-0.23	5.15
7,393.00	1.03	224.93	7,329.27	-240.67	777.10	813.39	0.35	0.25	15.73
7,489.00	1.13	215.35	7,425.25	-242.05	775.94	812.72	0.21	0.10	-9.98
7,584.00	0.87	216.00	7,520.24	-243.40	774.98	812.23	0.27	-0.27	0.68
7,679.00	0.84	217.16	7,615.23	-244.54	774.13	811.78	0.04	-0.03	1.22
7,773.00	1.51	187.48	7,709.21	-246.32	773.55	811.79	0.94	0.71	-31.57
7,868.00	1.65	192.45	7,804.17	-248.89	773.10	812.16	0.21	0.15	5.23
7,961.00	1.31	194.22	7,897.14	-251.23	772.55	812.37	0.37	-0.37	1.90
8,013.00	1.40	202.24	7,949.13	-252.40	772.16	812.36	0.40	0.17	15.42
Last SDI MWD Survey									
8,073.00	1.40	202.24	8,009.11	-253.75	771.61	812.26	0.00	0.00	0.00
Projection to TD									

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
639.00	638.99	1.50	-2.74	First SDI MWD Survey
8,013.00	7,949.13	-252.40	772.16	Last SDI MWD Survey
8,073.00	8,009.11	-253.75	771.61	Projection to TD

Checked By: _____ Approved By: _____ Date: _____