

RECEIVED

OIL CONS. DIV DIST. 3

MAY 20 2014

MAY 22 2014

Form 3160-5
(April 2004)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFarmington Field Office
Bureau of Land Management

FORM APPROVED

OMB No. 1004-0137

Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side.

1. Type of Well ☐ Oil Well ☒ Gas Well ☐ Other		5. Lease Serial No. Jicarilla Contract 102
2. Name of Operator EnerVest Operating, LLC		6. If Indian, Allottee, or Tribe Name
3a. Address 1001 Fannin St, Suite 800 Houston, TX 77002-6707	3b. Phone No. (include area code) 713-659-3500; 713-970-1847	7. If Unit or CA. Agreement Name and/or No.
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SHL: 1310' FSL & 1482' FWL (UL N) Sec. 9, T26N, R04W BHL: 660' FSL & 1980' FWL (UL N) Sec. 9, T26N, R04W		8. Well Name and No. Jicarilla Apache 102 #14M
		9. API Well No. 30-039-31193
		10. Field and Pool, or Exploratory Area Blanco Mesaverde/Basin Dakota
		11. County or Parish, State Rio Arriba, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/ Resume)	☐ Water Shut-off
☒ Subsequent Report	☐ Altering Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and abandon	☐ Temporarily Abandon	<u>Deviation & directional</u>
	☐ Convert to Injection	☐ Plug back	☐ Water Disposal	<u>Survey reports</u>

13. Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/ BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

EnerVest herewith submits the deviation report as run by D&J Drilling, LLC and the directional report as run by Scientific Drilling.

Attached are reports.

ACCEPTED FOR RECORD

MAY 21 2014

FARMINGTON FIELD OFFICE

BY: William Tambekou

14. I hereby certify that the foregoing is true and correct.

Name (Printed/ Typed)

Jeanie McMillan

Title

Sr. Regulatory Analyst

Signature

Jeanie McMillan

Date

May 14, 2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by 1/1

Title

Date

Conditions of approval, if any are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 AND Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations, and reports of such operations when completed, as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this

form and the number of copies to be submitted, particularly with regard to local area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office

present productive zones, or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and

NMOCD A

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

CORRECT API No.

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-31193		2 Pool Code 72319/71599		3 Pool Name BLANCO MESAVERDE/BASIN DAKOTA	
4 Property Code 306751		5 Property Name JICARILLA APACHE 102			6 Well Number 14M
7 OGRID No. 143199		8 Operator Name ENERVEST OPERATING, LLC			9 Elevation 7112'

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
N	9	26N	4W		1310'	SOUTH	1482'	WEST	RIO ARriba

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
N	9	26N	4W		606'	SOUTH	1958'	WEST	RIO ARriba

12 Dedicated Acres

MV-5/320; DK-W/320

13 Joint of Infill

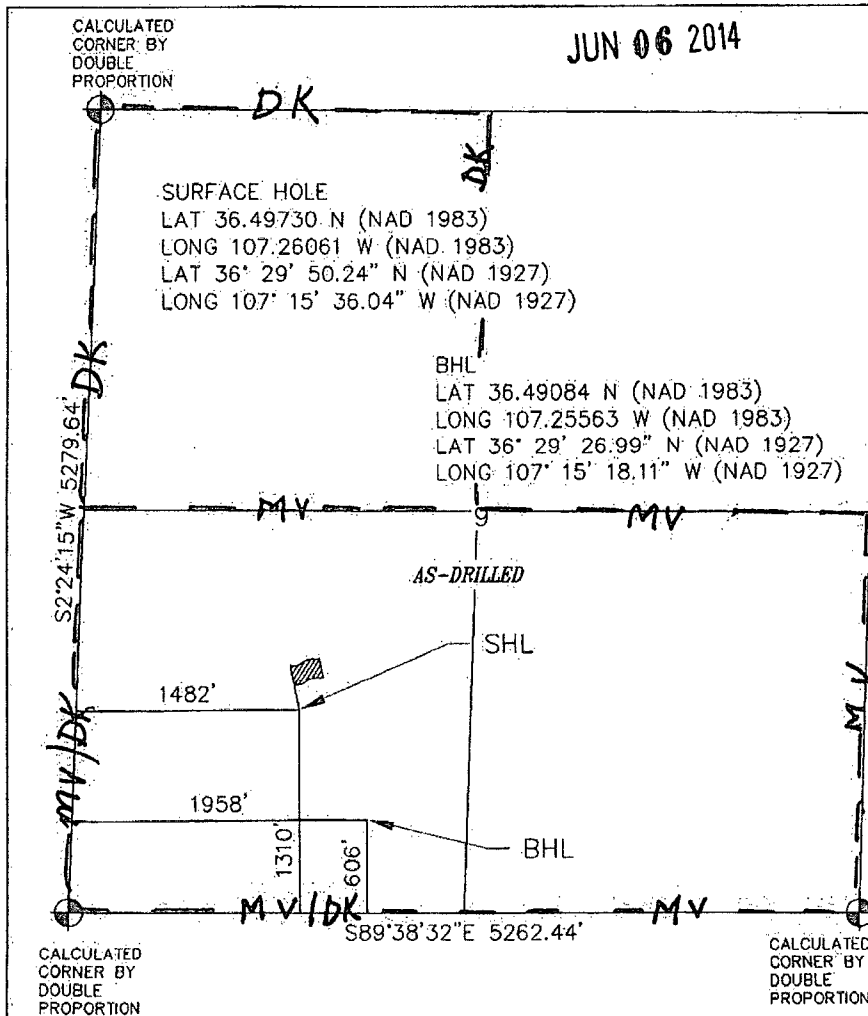
14 Consolidation Code

15 Order No.

NSL-7042 & NSL-7042A

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.

OIL CONS. DIV DIST. 3



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.

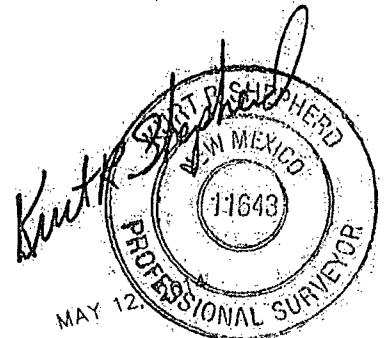
Signature: *Jeanie McMillan* Date: _____
Printed Name: *Jeanie McMillan*
E-mail Address: *mcmillan@enervest.net*

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.

Survey Date: MARCH 26, 2014

Signature and Seal of Professional Surveyor



Certificate Number 11643

D & J DRILLING, LLC
P. O. BOX 49
FARMINGTON, NM 87499



ORIGINAL

DATE: 04/24/14

TO: ENERVEST OPERATING LLC
2700 FARMINGTON AVE., BLK K, SUITE 1
FARMINGTON, NM 87401

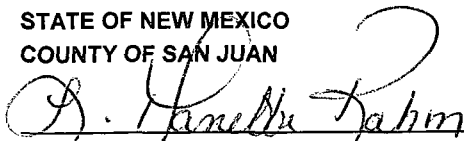
ATTN: MR. RICHARD TRUEHEART

THIS LETTER IS TO CERTIFY THAT D & J DRILLING, DID RUN DEVIATION SURVEYS AT
THE LISTED DEPTH ON YOUR JICARILLA 102 #14M, IN SEC09-T26N-R04W, IN RIO ARRIBA COUNTY,
NEW MEXICO. API WELL NUMBER - 30-039-31193

DEPTH	DEGREE DEVIATION
133 '	3/4
240 '	3/4
454 '	1 1/2

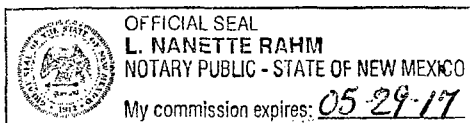
TO THE BEST OF MY KNOWLEDGE, I SWEAR THIS INFORMATION TO BE TRUE.

STATE OF NEW MEXICO
COUNTY OF SAN JUAN


NOTARY PUBLIC, L. NANETTE RAHM

SINCERELY,


OWNER- CLARENCE D. KEENOM





Scientific Drilling

Gyro Survey Certification

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

API 30-039-31193

Operator	EnerVest Operating LLC
Well Name & No.	Jicarilla Apache 102 #14M
County & State	Rio Arriba County, NM
SDI Job No.	330413EFK143933
Rig	D&J 2

I, Janie Collins, 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 8,400 feet is true and correct as determined from all available records.


Signature

30-Apr-14
Date

Janie Collins
Colorado District Well Planner
Scientific Drilling International

API 30-039-31193

EnerVest Operating LLC

Rio Arriba County, NM (NAD83)

Jicarilla

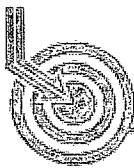
Jicarilla Apache 102 #14M

OH

Design: OH

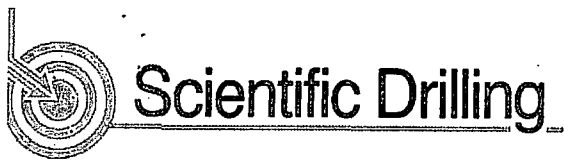
Standard Survey Report

30 April, 2014



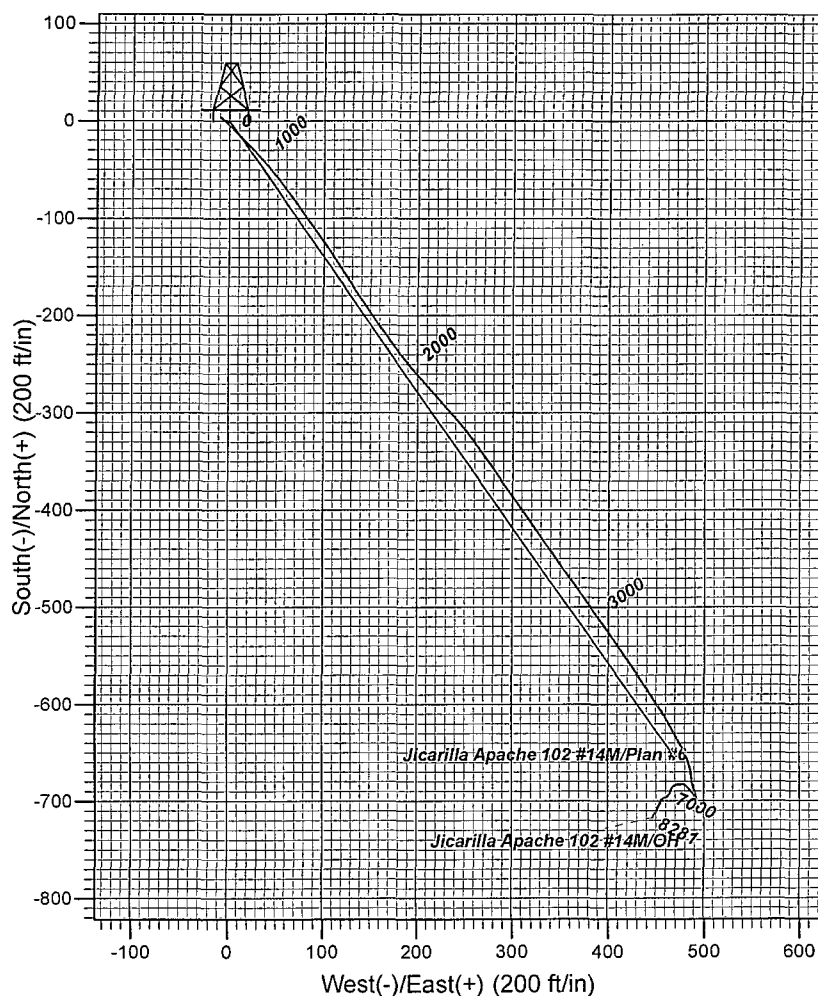
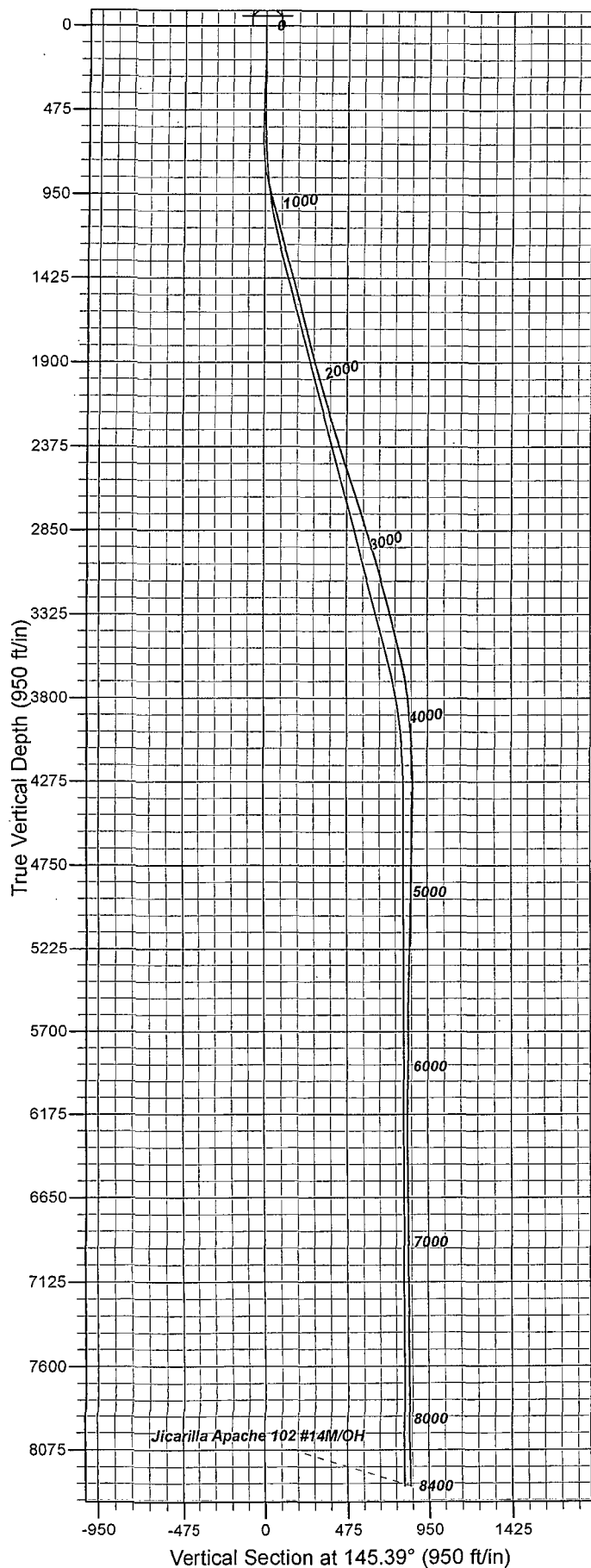
Scientific Drilling

www.scientificdrilling.com



Project: Rio Arriba County, NM (NAD83)
 Site: Jicarilla
 Well: Jicarilla Apache 102 #14M
 Wellbore: OH
 Design: OH

API 30-039-31193



Well Details: Jicarilla Apache 102 #14M

TVD Reference: WELL @ 7112.00ft (Original Well Elev)		Ground Level: 7112.00		Slot
+N/-S	+E/-W	Northing	Easting	
0.00	0.00	2001848.11	1343379.41	

REFERENCE INFORMATION

Co-ordinate (N/E) Reference: Well Jicarilla Apache 102 #14M, True North
 Vertical (TVD) Reference: WELL @ 7112.00ft (Original Well Elev)
 Section (VS) Reference: Slot - (0.00N, 0.00E)
 Measured Depth Reference: WELL @ 7112.00ft (Original Well Elev)
 Calculation Method: Minimum Curvature

PROJECT DETAILS: Rio Arriba County, NM (NAD83)

Geodetic System: US State Plane 1983
 Datum: North American Datum 1983
 Ellipsoid: GRS 1980
 Zone: New Mexico Central Zone

System Datum: Mean Sea Level

Plan: OH

11:52, April 30 2014

Survey Report



Company:	EnerVest Operating LLC	Local Co-ordinate Reference:	Well Jicarilla Apache 102 #14M
Project:	Rio Arriba County, NM (NAD83)	TVD Reference:	WELL @ 7112.00ft (Original Well Elev)
Site:	Jicarilla	MD Reference:	WELL @ 7112.00ft (Original Well Elev)
Well:	Jicarilla Apache 102 #14M API 30-039-31193	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 102 #14M					
Well Position	+N/-S	0.00 ft	Northing:	2,001,848.12 usft	Latitude:	36° 29' 50.280 N
	+E/-W	0.00 ft	Easting:	1,343,379.41 usft	Longitude:	107° 15' 38.196 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	ft	Ground Level:	7,112.00 ft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2013	3/21/2014	9.36	63.29	50,314

Design:	OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	145.39	

Survey Program		Date 4/30/2014		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
100.00	8,400.00	Survey #2 - Gyro Survey (OH)	SDI Standard Keeper 103	SDI Standard Wireline Keeper ver 1.0.3

Measured	Inclination	Azimuth	Vertical	+N-S	+E-W	Vertical	Dogleg	Build	Turn
Depth	(°)	(°)	Depth	(ft)	(ft)	Section	Rate	Rate	Rate
(ft)			(ft)			(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.76	273.70	100.00	0.04	-0.66	-0.41	0.76	0.76	0.00
200.00	0.88	274.68	199.99	0.15	-2.09	-1.31	0.12	0.12	0.98
300.00	0.86	284.07	299.98	0.39	-3.58	-2.36	0.14	-0.02	9.39
400.00	1.37	298.99	399.96	1.16	-5.36	-3.99	0.58	0.51	14.92
500.00	1.66	308.79	499.92	2.64	-7.53	-6.45	0.39	0.29	9.80
600.00	0.73	329.61	599.90	4.10	-8.98	-8.48	1.01	-0.93	20.82
700.00	3.29	130.06	699.85	2.80	-7.11	-6.34	3.99	2.56	160.45
800.00	8.93	133.17	799.24	-4.36	0.76	4.02	5.65	5.64	3.11
900.00	14.01	135.74	897.22	-18.35	14.87	23.55	5.10	5.08	2.57

Survey Report



Company: EnerVest Operating LLC
Project: Rio Arriba County, NM (NAD83)
Site: Jicarilla
Well: Jicarilla Apache 102 #14M -API 30-039-31193
Wellbore: OH
Design: OH

Local Co-ordinate Reference
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:
Database:

Well Jicarilla Apache 102 #14M
 WELL @ 7112.00ft (Original Well Elev)
 WELL @ 7112.00ft (Original Well Elev)
 True
 Minimum Curvature
 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)
1,000.00	14.20	136.50	994.20	-35.92	31.76	47.60	0.27	0.19	0.76
1,100.00	14.54	141.62	1,091.08	-54.65	48.00	72.25	1.31	0.34	5.12
1,200.00	14.83	141.23	1,187.81	-74.47	63.81	97.54	0.31	0.29	-0.39
1,300.00	16.09	143.58	1,284.19	-95.60	80.05	124.15	1.41	1.26	2.35
1,400.00	16.06	144.58	1,380.28	-118.03	96.30	151.83	0.28	-0.03	1.00
1,500.00	14.93	145.67	1,476.64	-139.94	111.58	178.55	1.17	-1.13	1.09
1,600.00	14.21	146.18	1,573.43	-160.77	125.67	203.70	0.73	-0.72	0.51
1,700.00	14.50	145.83	1,670.31	-181.33	139.54	228.49	0.30	0.29	-0.35
1,800.00	14.54	144.46	1,767.11	-201.90	153.86	253.56	0.35	0.04	-1.37
1,900.00	14.85	143.32	1,863.84	-222.39	168.82	278.92	0.42	0.31	-1.14
2,000.00	15.65	140.50	1,960.32	-243.08	185.05	305.17	1.09	0.80	-2.82
2,100.00	16.59	137.86	2,056.39	-264.07	203.21	332.76	1.19	0.94	-2.64
2,200.00	16.93	137.84	2,152.14	-285.45	222.56	361.35	0.34	0.34	-0.02
2,300.00	17.45	139.05	2,247.67	-307.57	242.16	390.68	0.63	0.52	1.21
2,400.00	18.36	143.99	2,342.84	-331.63	261.25	421.33	1.77	0.91	4.94
2,500.00	18.45	144.73	2,437.72	-357.29	279.64	452.90	0.25	0.09	0.74
2,600.00	18.31	144.39	2,532.62	-382.98	297.93	484.43	0.18	-0.14	-0.34
2,700.00	17.84	144.43	2,627.68	-408.21	315.98	515.45	0.47	-0.47	0.04
2,800.00	17.64	144.01	2,722.93	-432.93	333.80	545.91	0.24	-0.20	-0.42
2,900.00	17.82	144.47	2,818.18	-457.64	351.59	576.36	0.23	0.18	0.46
3,000.00	17.45	144.40	2,913.48	-482.29	369.22	606.65	0.37	-0.37	-0.07
3,100.00	17.32	144.92	3,008.91	-506.66	386.50	636.53	0.20	-0.13	0.52
3,200.00	16.29	144.78	3,104.64	-530.30	403.14	665.44	1.03	-1.03	-0.14
3,300.00	16.42	145.08	3,200.59	-553.35	419.32	693.59	0.16	0.13	0.30
3,400.00	15.39	145.52	3,296.76	-575.87	434.92	721.00	1.04	-1.03	0.44
3,500.00	15.01	146.12	3,393.26	-597.56	449.66	747.22	0.41	-0.38	0.60
3,600.00	13.72	150.06	3,490.14	-618.59	462.79	771.99	1.62	-1.29	3.94
3,700.00	12.58	152.26	3,587.52	-638.51	473.78	794.62	1.24	-1.14	2.20
3,800.00	10.56	157.66	3,685.48	-656.62	482.33	814.39	2.29	-2.02	5.40
3,900.00	8.04	173.85	3,784.18	-672.06	486.57	829.49	3.61	-2.52	16.19
4,000.00	5.80	165.98	3,883.44	-683.91	488.54	840.37	2.43	-2.24	-7.87
4,100.00	5.80	165.99	3,982.93	-693.72	490.99	849.83	0.00	0.00	0.01
4,200.00	3.22	164.41	4,082.61	-701.33	492.97	857.22	2.58	-2.58	-1.58
4,300.00	1.49	160.21	4,182.53	-705.26	494.16	861.13	1.74	-1.73	-4.20
4,400.00	0.43	152.42	4,282.51	-706.81	494.78	862.76	1.07	-1.06	-7.79
4,500.00	1.18	353.71	4,382.50	-706.12	494.84	862.23	1.59	0.75	-158.71
4,600.00	1.38	347.48	4,482.48	-703.92	494.46	860.20	0.24	0.20	-6.23
4,700.00	1.26	353.12	4,582.45	-701.66	494.07	858.11	0.18	-0.12	5.64
4,800.00	0.98	339.07	4,682.43	-699.77	493.63	856.31	0.39	-0.28	-14.05
4,900.00	0.82	340.72	4,782.42	-698.29	493.09	854.79	0.16	-0.16	1.65
5,000.00	0.90	327.88	4,882.41	-696.95	492.44	853.32	0.21	0.08	-12.84
5,100.00	0.91	327.87	4,982.40	-695.61	491.60	851.74	0.01	0.01	-0.01
5,200.00	2.37	320.08	5,082.35	-693.35	489.85	848.88	1.47	1.46	-7.79
5,300.00	2.25	316.28	5,182.27	-690.35	487.17	844.89	0.19	-0.12	-3.80

Survey Report



Company: EnerVest Operating LLC
 Project: Rio Arriba County, NM (NAD83)
 Site: Jicarilla
 Well: Jicarilla Apache 102 #14M **30-039-31193**
 Wellbore: OH
 Design: OH

Local Co-ordinate Reference:
 TVD Reference:
 MD Reference:
 North Reference:
 Survey Calculation Method:
 Database:

Well Jicarilla Apache 102 #14M
 WELL @ 7112.00ft (Original Well Elev)
 WELL @ 7112.00ft (Original Well Elev)
 True
 Minimum Curvature
 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)
5,400.00	1.98	317.67	5,282.20	-687.65	484.65	841.24	0.27	-0.27	1.39
5,500.00	1.69	313.48	5,382.15	-685.36	482.41	838.08	0.32	-0.29	-4.19
5,600.00	1.72	307.47	5,482.11	-683.43	480.15	835.21	0.18	0.03	-6.01
5,700.00	0.38	272.45	5,582.09	-682.51	478.63	833.58	1.43	-1.34	-35.02
5,800.00	0.51	245.52	5,682.09	-682.68	477.89	833.31	0.24	0.13	-26.93
5,900.00	0.64	288.12	5,782.08	-682.69	476.96	832.78	0.43	0.13	42.60
6,000.00	0.79	268.57	5,882.08	-682.53	475.74	831.96	0.28	0.15	-19.55
6,100.00	0.56	259.27	5,982.07	-682.64	474.57	831.39	0.25	-0.23	-9.30
6,200.00	0.56	259.28	6,082.06	-682.82	473.61	830.99	0.00	0.00	0.01
6,300.00	0.56	259.28	6,182.06	-683.00	472.65	830.59	0.00	0.00	0.00
6,400.00	0.56	259.21	6,282.05	-683.19	471.69	830.20	0.00	0.00	-0.07
6,500.00	0.49	254.65	6,382.05	-683.39	470.79	829.86	0.08	-0.07	-4.56
6,600.00	0.67	250.22	6,482.04	-683.70	469.83	829.57	0.19	0.18	-4.43
6,700.00	0.83	229.83	6,582.04	-684.37	468.73	829.49	0.31	0.16	-20.39
6,800.00	1.05	212.48	6,682.02	-685.61	467.68	829.92	0.36	0.22	-17.35
6,900.00	1.06	211.21	6,782.01	-687.17	466.71	830.65	0.03	0.01	-1.27
7,000.00	1.15	205.76	6,881.99	-688.87	465.80	831.53	0.14	0.09	-5.45
7,100.00	1.25	201.24	6,981.97	-690.79	464.96	832.64	0.14	0.10	-4.52
7,200.00	1.30	210.25	7,081.94	-692.78	464.00	833.73	0.21	0.05	9.01
7,300.00	1.22	222.51	7,181.92	-694.55	462.71	834.45	0.28	-0.08	12.26
7,400.00	1.08	240.67	7,281.90	-695.79	461.17	834.60	0.39	-0.14	18.16
7,500.00	1.09	240.75	7,381.88	-696.72	459.51	834.42	0.01	0.01	0.08
7,600.00	0.84	246.62	7,481.86	-697.48	458.01	834.19	0.27	-0.25	5.87
7,700.00	0.72	250.23	7,581.86	-697.98	456.75	833.89	0.13	-0.12	3.61
7,800.00	0.67	244.17	7,681.85	-698.45	455.63	833.64	0.09	-0.05	-6.06
7,900.00	1.72	188.69	7,781.83	-700.19	454.88	834.64	1.45	1.05	-55.48
8,000.00	1.84	210.44	7,881.78	-703.05	453.84	836.41	0.68	0.12	21.75
8,100.00	2.14	204.42	7,981.72	-706.14	452.25	838.05	0.37	0.30	-6.02
8,200.00	2.30	209.56	8,081.65	-709.58	450.49	839.88	0.26	0.16	5.14
8,300.00	2.31	213.77	8,181.56	-713.00	448.38	841.50	0.17	0.01	4.21
8,400.00	2.35	204.85	8,281.48	-716.54	446.40	843.29	0.36	0.04	-8.92

Checked By: _____

Approved By: _____

Date: _____