

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources

Form C-104
Revised August 1, 2011

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Submit one copy to appropriate District Office

☐ AMENDED REPORT

I. REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

¹ Operator name and Address Enduring Resources IV LLC. 200 Energy Court Farmington NM 87401		² OGRID Number 372286	
		³ Reason for Filing Code/ Effective Date RT	
⁴ API Number 30-045-38283	⁵ Pool Name LYBROOK MANCOS W		⁶ Pool Code 98157
⁷ Property Code 332891	⁸ Property Name GREATER LYBROOK UNIT		⁹ Well Number #048H

II. ¹⁰ Surface Location

Ul or lot no. M	Section 23	Township 23N	Range 9W	Lot Idn	Feet from the 390'	North/South Line SOUTH	Feet from the 655'	East/West line WEST	County SAN JUAN
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¹¹ Bottom Hole Location

UL or lot no. A	Section 35	Township 23N	Range 9W	Lot Idn	Feet from the 553'	North/South line NORTH	Feet from the 188'	East/West line EAST	County SAN JUAN
¹² Lse Code F	¹³ Producing Method Code		¹⁴ Gas Connection Date 7/12/2023		¹⁵ C-129 Permit Number	¹⁶ C-129 Effective Date		¹⁷ C-129 Expiration Date	

III. Oil and Gas Transporters

¹⁸ Transporter OGRID	¹⁹ Transporter Name and Address	²⁰ O/G/W
248440	WESTERN REFINING COMPANY, LLC	O
373888	HARVEST FOUR CORNERS. LLC	G

IV. Well Completion Data

²¹ Spud Date 3/6/2023	²² Ready Date 7/12/2023	²³ TD 12191' MD 4606' TVD	²⁴ PBTD 12135.2' MD 4609' TVD	²⁵ Perforations ~ 5030' - 12130' MD ~ 4599'-4609' TVD	²⁶ DHC, MC R-22081	
²⁷ Hole Size		²⁸ Casing & Tubing Size		²⁹ Depth Set		³⁰ Sacks Cement
17-1/2"		13-3/8",54.5#, J-55		372.91' MD		354 sx- surface
12-1/4"		9-5/8",36#, J-55		2696.8' MD		656 sx- surface
8-1/2"		5-1/2",17#, P-110		12191' MD		1848 sx- surface

V. Well Test Data

³¹ Date New Oil	³² Gas Delivery Date	³³ Test Date	³⁴ Test Length	³⁵ Tbg. Pressure	³⁶ Csg. Pressure
³⁷ Choke Size	³⁸ Oil	³⁹ Water	⁴⁰ Gas		⁴¹ Test Method
⁴² 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. Signature: <i>Lena Wilson</i>			OIL CONSERVATION DIVISION Approved by: <i>PATRICIA MARTINEZ</i>		
Printed name: Lena Wilson			Title: <i>PETROLEUM SPECIALIST</i>		
Title: Regulatory Agent			Approval Date: <i>6/7/2023</i>		
E-mail Address: lwilson@enduringresources.com			<i>RT EXPIRES 10/12/2023</i>		
Date: 5/25/2023		Phone: 253-737-3540			



ENDURING RESOURCES IV LLC

May 25, 2023

Re: GREATER LYBROOK UNIT 048H-30-045-38283

Pursuant to NMOCD rule 19.15.7.16(C) request is herein made to keep all data and accompanying attachments contained in form C-105 confidential.

Sincerely,

A handwritten signature in blue ink, appearing to read "Heather Huntington".

Heather Huntington
Permitting Technician
Enduring Resources, LLC.
hhuntington@enduringresources.com

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

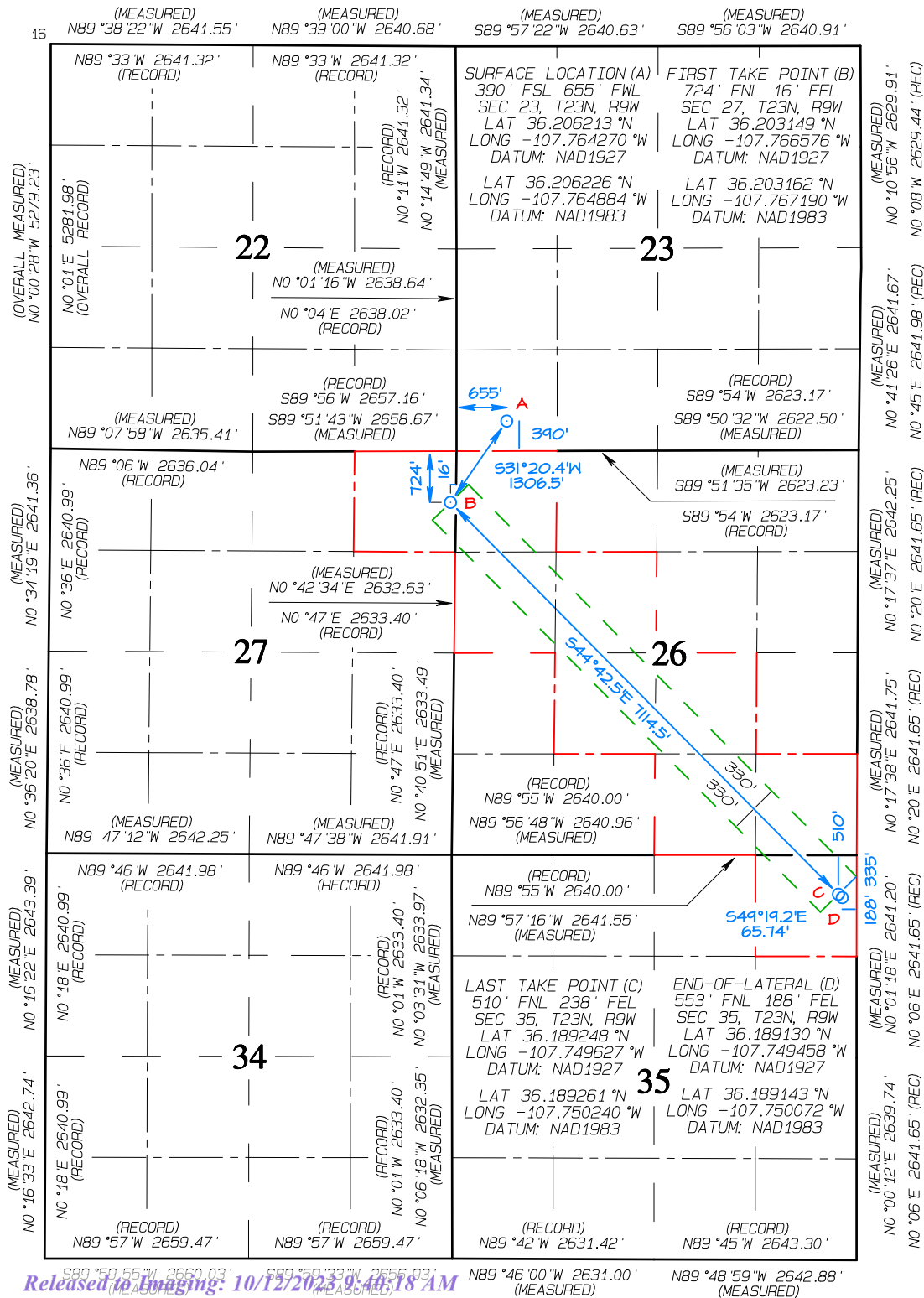
1 API Number 30-045-38283		2 Pool Code 98157		3 Pool Name LYBROOK MANCOS W			
4 Property Code 332891		5 Property Name GREATER LYBROOK UNIT				6 Well Number 048H	
7 OGRID No. 372286		8 Operator Name ENDURING RESOURCES, LLC				9 Elevation 6747'	

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	23	23N	9W		390	SOUTH	655	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	35	23N	9W		553	NORTH	188	EAST	SAN JUAN



12 Dedicated Acres 360.0		W/2 NW/4, SE/4 NW/4 NE/4 SW/4, W/2 SE/4 SE/4 SE/4 - Section 26 NE/4 NE/4 - Section 27 NE/4 NE/4 - Section 35	
13 Joint or Infill	14 Consolidation Code		
15 Order No. R-22081			

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 working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.	
Signature Heather Huntington	Date 5/30/23
Printed Name hhuntington@enduringresources.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.	
Date Revised: MAY 30, 2023	
Date of Survey: MAY 20, 2021	
Signature and Seal of Professional Surveyor	



JASON C. EDWARDS
Certificate Number 15269

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

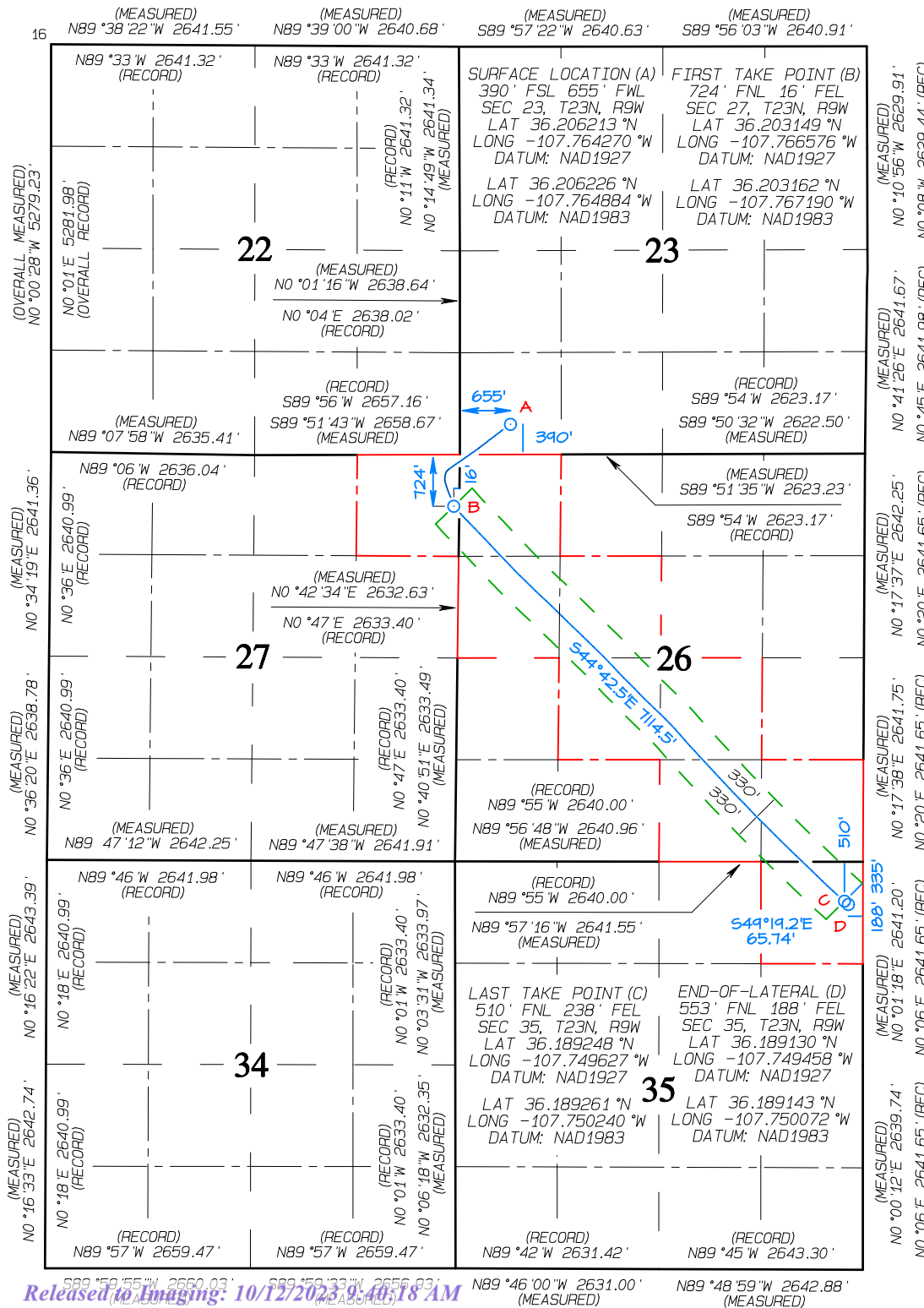
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Signature <i>Heather Huntington</i>	Date 5/30/23
Printed Name Heather Huntington	
E-mail Address hhuntington@enduringresources.com	

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Date Revised: MAY 30, 2023 Date of Survey: MAY 20, 2021	
Signature and Seal of Professional Surveyor	
JASON C. EDWARDS NEW MEXICO 15269 REGISTERED PROFESSIONAL SURVEYOR JASON C. EDWARDS Certificate Number 15269	

AS-DRILLED WELL LOCATION AND ACREAGE DEDICATION PLAT

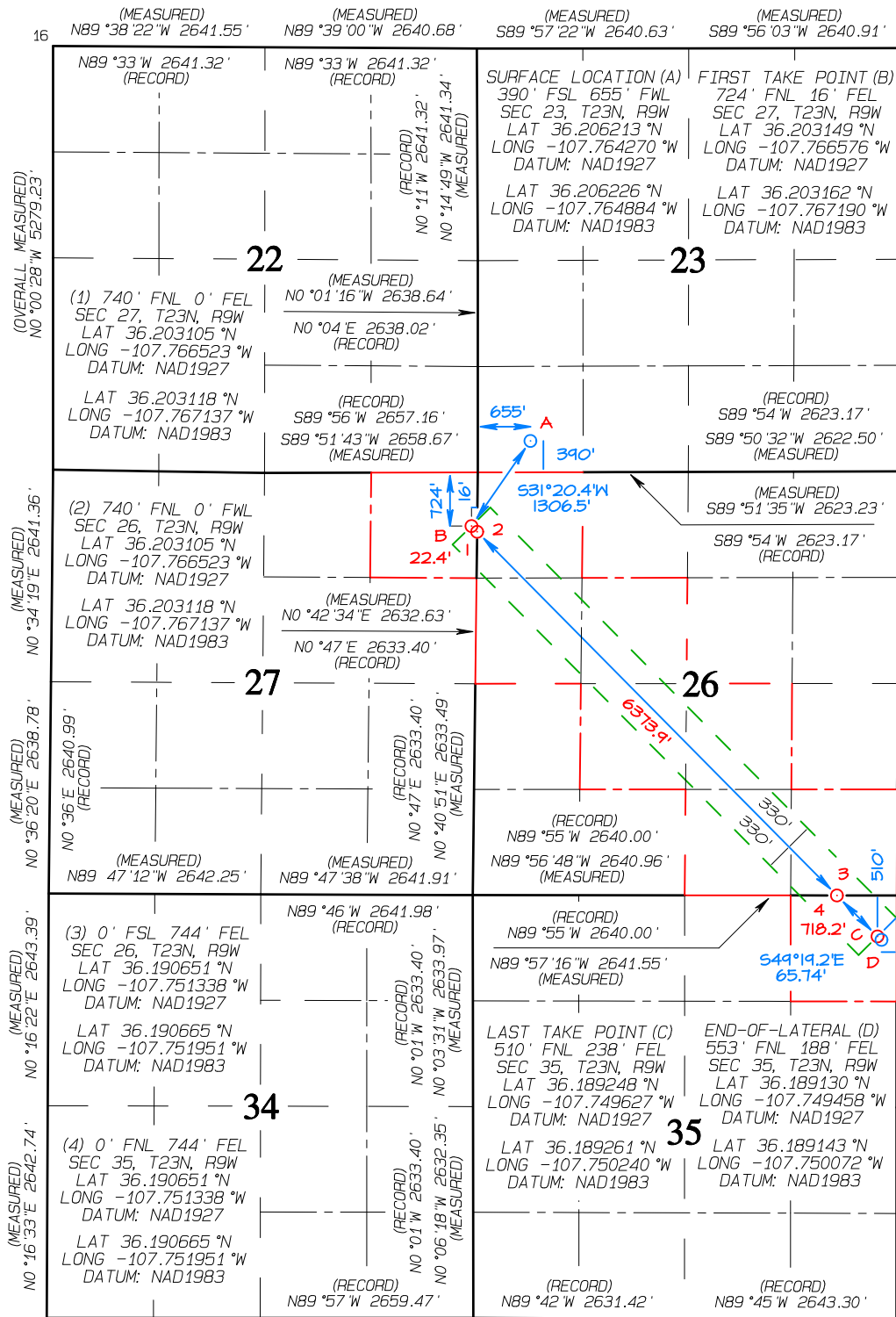
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Signature Heather Huntington	Date 5/30/2023
Printed Name hhuntington@enduringresources.com	
E-mail Address	

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Signature and Seal of Professional Surveyor	



JASON C. EDWARDS
Certificate Number 15269



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Reference	MWD surveys Original Hole		
Filter type:	GLOBAL FILTER APPLIED: All wellpaths within 200'+ 100/1000 of reference		
Interpolation Method:	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 1,420.10ft	Error Surface:	Ellipsoid Separation
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Program	Date	5/18/2023		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
416.00	2,646.00	MWD surf (Original Hole)	MWD	OWSG MWD - Standard
2,756.00	12,123.00	MWD (Original Hole)	MWD	OWSG MWD - Standard
12,201.00	12,201.00	Projection (Original Hole)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Greater Lybrook Pad (48,49,50,51 & 52)						
Greater Lybrook Unit No. 048H - Original Hole - rev4	3,000.00	2,999.92	0.45	-1.27	0.261	Level 1<1.00, CC, SF
Greater Lybrook Unit No. 048H - Original Hole - rev4	12,000.00	12,021.77	9.99	-12.84	0.437	Level 1<1.00, ES
Greater Lybrook Unit No. 049H - Original Hole - Surveys	514.14	514.14	19.73	17.63	9.375	CC
Greater Lybrook Unit No. 049H - Original Hole - Surveys	800.00	800.00	20.65	16.50	4.979	ES
Greater Lybrook Unit No. 049H - Original Hole - Surveys	11,700.00	11,111.06	738.17	487.91	2.950	SF
Greater Lybrook Unit No. 050H - Original Hole - Surveys	0.00	0.00	39.92			
Greater Lybrook Unit No. 050H - Original Hole - Surveys	200.00	199.87	40.31	39.65	61.940	ES
Greater Lybrook Unit No. 050H - Original Hole - Surveys	12,201.00	11,947.62	1,204.25	864.54	3.545	SF
Greater Lybrook Unit No. 051H - Original Hole - Surveys	0.00	0.00	80.09			
Greater Lybrook Unit No. 051H - Original Hole - Surveys	100.00	99.82	80.22	79.91	264.884	ES
Greater Lybrook Unit No. 051H - Original Hole - Surveys	1,100.00	1,099.35	102.74	96.44	16.307	SF
Greater Lybrook Unit No. 052H - Original Hole - Surveys	600.00	600.24	99.33	96.60	36.475	CC
Greater Lybrook Unit No. 052H - Original Hole - Surveys	900.00	900.29	100.77	95.90	20.706	ES
Greater Lybrook Unit No. 052H - Original Hole - Surveys	1,100.00	1,099.25	114.70	108.43	18.299	SF
Rodeo Unit 511 pad (511, 512 & 513)						
Rodeo Unit #513H - Original Hole - Surveys Original Hole	12,201.00	4,866.00	347.38	236.71	3.139	CC, ES, SF
W Lybrook 726 Pad (726, 728, 729, 760 & 761)						
W Lybrook Unit No. 726H - Original Hole - Surveys Origin	567.12	569.04	171.19	168.74	69.929	CC
W Lybrook Unit No. 726H - Original Hole - Surveys Origin	900.00	902.41	172.37	167.59	36.047	ES
W Lybrook Unit No. 726H - Original Hole - Surveys Origin	1,200.00	1,194.12	189.56	182.64	27.375	SF
W Lybrook Unit No. 726H - Sidetrack 01 - Surveys Sidetr	567.12	569.04	171.19	168.74	69.929	CC
W Lybrook Unit No. 726H - Sidetrack 01 - Surveys Sidetr	900.00	902.41	172.37	167.59	36.047	ES
W Lybrook Unit No. 726H - Sidetrack 01 - Surveys Sidetr	1,200.00	1,194.12	189.56	182.64	27.375	SF
W Lybrook Unit No. 728H - Original Hole - Surveys Origin	0.00	2.99	161.17			
W Lybrook Unit No. 728H - Original Hole - Surveys Origin	1,000.00	1,005.62	162.93	157.42	29.620	ES
W Lybrook Unit No. 728H - Original Hole - Surveys Origin	1,300.00	1,302.20	179.47	171.79	23.374	SF
W Lybrook Unit No. 729H - Original Hole - Surveys Origin	1,335.70	1,348.15	92.71	84.63	11.479	CC, ES
W Lybrook Unit No. 729H - Original Hole - Surveys Origin	1,400.00	1,412.38	94.32	85.76	11.019	SF
W Lybrook Unit No. 760H - Original Hole - Surveys Origin	0.00	2.98	145.59			
W Lybrook Unit No. 760H - Original Hole - Surveys Origin	1,100.00	1,103.01	151.71	145.48	24.334	ES
W Lybrook Unit No. 760H - Original Hole - Surveys Origin	1,400.00	1,399.30	179.08	170.62	21.179	SF
W Lybrook Unit No. 761H - Original Hole - Surveys Origin	1,772.85	1,796.00	84.09	73.06	7.621	CC, ES
W Lybrook Unit No. 761H - Original Hole - Surveys Origin	1,900.00	1,919.86	88.90	76.69	7.283	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



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Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 048H - Original Hole - rev4													Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2646-MWD													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis			Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
2,646.00	2,566.92	2,646.00	2,566.92	0.00	0.00	89.76	-295.76	-394.13	0.06					
2,700.00	2,618.35	2,700.00	2,618.33	0.29	0.34	62.87	-305.92	-407.18	0.13	-0.36	0.49	0.267	Level 1<1.00	
2,800.00	2,713.54	2,799.97	2,713.28	0.70	0.97	47.53	-324.90	-432.04	1.13	0.01	1.13	1.008	Level 2<1.50	
2,900.00	2,807.58	2,899.93	2,807.01	1.07	1.65	12.62	-344.72	-460.56	1.66	0.57	1.09	1.524	Level 3<2.00	
3,000.00	2,900.65	2,999.92	2,900.57	1.51	2.33	-62.07	-364.67	-489.62	0.45	-1.27	1.72	0.261	Level 1<1.00, CC, SF	
3,000.00	2,900.51	2,999.91	2,900.57	1.51	2.33	-107.31	-364.67	-489.62	0.51	-1.28	1.78	0.283	Level 1<1.00	
3,100.00	2,993.55	3,099.90	2,994.13	1.97	3.02	-172.43	-384.62	-518.69	1.65	-0.43	2.08	0.795	Level 1<1.00	
3,200.00	3,087.03	3,199.89	3,087.70	2.44	3.72	158.91	-404.57	-547.76	2.05	-0.54	2.58	0.793	Level 1<1.00	
3,300.00	3,180.19	3,299.89	3,181.27	2.92	4.41	162.91	-424.52	-576.83	3.23	0.13	3.10	1.041	Level 2<1.50	
3,399.66	3,273.52	3,399.54	3,274.53	3.41	5.10	152.59	-444.41	-605.80	3.24	-0.26	3.50	0.925	Level 1<1.00	
3,400.00	3,274.17	3,399.87	3,274.84	3.41	5.10	135.11	-444.47	-605.90	2.71	-1.03	3.75	0.724	Level 1<1.00	
3,500.00	3,367.41	3,499.86	3,368.41	3.92	5.80	146.11	-464.42	-634.97	3.38	-0.65	4.03	0.838	Level 1<1.00	
3,600.00	3,459.96	3,599.82	3,461.94	4.47	6.49	168.00	-484.37	-664.03	5.74	1.33	4.40	1.303	Level 2<1.50	
3,700.00	3,552.80	3,699.80	3,555.50	5.03	7.19	174.15	-504.32	-693.10	7.71	2.74	4.97	1.550	Level 3<2.00	
3,800.00	3,646.16	3,799.80	3,649.07	5.59	7.89	172.66	-524.27	-722.17	8.33	3.05	5.28	1.577	Level 3<2.00	
3,900.00	3,739.94	3,899.78	3,742.63	6.12	8.58	169.88	-544.22	-751.24	7.81	2.12	5.69	1.373	Level 2<1.50	
4,000.00	3,835.14	3,999.64	3,836.08	6.63	9.28	132.62	-564.15	-780.27	4.12	-2.54	6.66	0.619	Level 1<1.00	
4,033.53	3,867.00	4,033.14	3,867.43	6.80	9.51	111.08	-570.83	-790.01	3.75	-3.88	7.64	0.491	Level 1<1.00	
4,100.00	3,930.20	4,099.53	3,929.56	7.13	9.98	70.06	-584.08	-809.31	4.69	-3.59	8.29	0.566	Level 1<1.00	
4,200.00	4,022.81	4,199.64	4,023.26	7.72	10.67	110.62	-604.68	-837.83	13.24	-3.22	16.46	0.804	Level 1<1.00	
4,300.00	4,111.34	4,302.07	4,118.74	8.35	11.34	142.50	-635.75	-857.41	26.25	8.90	17.35	1.513	Level 3<2.00	
4,400.00	4,198.24	4,406.93	4,213.30	8.90	11.94	157.90	-680.29	-863.83	34.03	17.29	16.74	2.033		
4,500.00	4,283.14	4,512.22	4,301.99	9.36	12.46	166.45	-736.30	-856.44	33.14	17.88	15.26	2.172		
4,600.00	4,364.26	4,616.17	4,382.13	9.78	12.93	165.19	-799.66	-837.75	27.05	14.22	12.82	2.109		
4,700.00	4,437.42	4,719.15	4,452.83	10.25	13.37	170.44	-868.64	-808.92	20.19	10.04	10.15	1.989	Level 3<2.00	
4,787.98	4,492.47	4,808.80	4,506.18	10.74	13.75	-167.35	-932.61	-775.93	17.08	6.57	10.51	1.625	Level 3<2.00	
4,800.00	4,499.34	4,820.93	4,512.76	10.81	13.80	-162.29	-941.49	-770.93	17.06	6.11	10.94	1.559	Level 3<2.00	
4,900.00	4,549.41	4,921.25	4,563.48	11.42	14.26	-140.97	-1,015.90	-726.75	21.33	8.11	13.21	1.614	Level 3<2.00	
5,000.00	4,592.10	5,022.53	4,605.85	12.03	14.79	-130.96	-1,092.35	-675.85	22.36	7.59	14.78	1.513	Level 3<2.00	
5,100.00	4,620.02	5,123.58	4,632.83	12.67	15.39	-131.49	-1,168.98	-615.97	19.47	3.60	15.87	1.227	Level 2<1.50	
5,200.00	4,632.31	5,224.70	4,643.69	13.41	16.12	-136.39	-1,243.64	-548.84	15.71	0.38	15.32	1.025	Level 2<1.50	
5,300.00	4,637.77	5,324.73	4,643.77	14.37	16.99	-117.50	-1,315.02	-478.77	12.98	-6.98	19.96	0.650	Level 1<1.00	
5,371.99	4,639.40	5,396.70	4,643.66	15.17	17.70	-109.74	-1,366.33	-428.31	12.61	-7.24	19.85	0.635	Level 1<1.00	
5,400.00	4,639.18	5,424.71	4,643.61	15.50	18.00	-110.53	-1,386.30	-408.66	12.65	-7.79	20.44	0.619	Level 1<1.00	
5,500.00	4,639.23	5,524.71	4,643.46	16.76	19.12	-108.14	-1,457.60	-338.55	13.56	-7.76	21.32	0.636	Level 1<1.00	
5,600.00	4,638.86	5,624.69	4,643.30	18.32	20.44	-107.26	-1,528.88	-268.44	14.98	-9.01	23.99	0.624	Level 1<1.00	
5,700.00	4,639.03	5,724.63	4,643.14	20.94	23.15	-103.36	-1,600.13	-198.36	17.74	0.17	17.57	1.010	Level 2<1.50	
5,800.00	4,638.74	5,824.53	4,642.99	23.46	25.52	-101.41	-1,671.36	-128.31	21.49	2.61	18.87	1.139	Level 2<1.50	
5,900.00	4,641.22	5,924.50	4,642.83	25.89	27.83	-94.43	-1,742.63	-58.22	20.85	2.38	18.47	1.129	Level 2<1.50	
5,935.83	4,641.92	5,960.32	4,642.78	26.73	28.64	-92.37	-1,768.18	-33.10	20.67	2.25	18.42	1.122	Level 2<1.50	
6,000.00	4,642.45	6,024.48	4,642.68	28.25	30.10	-90.61	-1,813.92	11.89	21.29	2.82	18.48	1.152	Level 2<1.50	
6,100.00	4,642.17	6,124.46	4,642.52	30.56	32.34	-90.86	-1,885.20	82.00	23.15	3.73	19.42	1.192	Level 2<1.50	
6,200.00	4,643.36	6,224.44	4,642.36	32.85	34.56	-87.43	-1,956.48	152.10	22.47	2.83	19.64	1.144	Level 2<1.50	
6,300.00	4,644.93	6,324.40	4,642.21	35.13	36.78	-82.33	-2,027.75	222.19	20.38	2.19	18.19	1.120	Level 2<1.50	
6,400.00	4,644.27	6,424.39	4,642.05	37.40	38.99	-83.31	-2,099.04	292.30	19.02	0.45	18.57	1.024	Level 2<1.50	
6,500.00	4,646.36	6,524.31	4,641.90	39.66	41.19	-74.31	-2,170.28	362.37	16.56	2.00	14.56	1.137	Level 2<1.50	
6,600.00	4,649.49	6,624.17	4,641.74	41.91	43.39	-56.87	-2,241.48	432.39	14.21	2.90	11.31	1.256	Level 2<1.50	
6,700.00	4,652.08	6,723.99	4,641.59	44.17	45.59	-32.07	-2,312.65	502.38	12.39	2.84	9.55	1.298	Level 2<1.50	
6,800.00	4,650.97	6,823.96	4,641.43	46.41	47.79	-27.60	-2,383.93	572.48	10.76	1.48	9.28	1.159	Level 2<1.50	
6,900.00	4,649.40	6,923.95	4,641.27	48.65	49.99	-24.57	-2,455.21	642.59	8.94	0.12	8.82	1.013	Level 2<1.50	
7,000.00	4,648.08	7,023.91	4,641.12	50.90	52.19	-12.20	-2,526.48	712.69	7.12	-2.63	9.74	0.730	Level 1<1.00	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 048H - Original Hole - rev4												Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2646-MWD												Offset Well Error:	0.00 ft
Reference												Rule Assigned:	
Measured Depth (ft)												Distance	
Vertical Depth (ft)												Between Centres (ft)	
Measured Depth (ft)												Between Ellipses (ft)	
Vertical Depth (ft)												Minimum Separation (ft)	
Reference												Separation Factor	
Offset												Warning	
Semi Major Axis												Offset Wellbore Centre	
Reference												+N/-S (ft)	
Offset												+E/-W (ft)	
Highside Toolface (°)												Between Centres (ft)	
7,099.43	4,647.05	7,123.30	4,640.96	53.13	54.39	12.89	-2,597.34	782.38	6.25	-4.55	10.80	0.578	Level 1<1.00
7,100.00	4,647.03	7,123.86	4,640.96	53.14	54.40	14.64	-2,597.74	782.77	6.27	-4.28	10.55	0.594	Level 1<1.00
7,200.00	4,646.32	7,223.83	4,640.81	55.39	56.61	35.60	-2,669.02	852.87	6.78	-5.04	11.82	0.573	Level 1<1.00
7,300.00	4,646.06	7,323.80	4,640.65	57.63	58.82	48.67	-2,740.29	922.97	8.19	-5.60	13.79	0.594	Level 1<1.00
7,400.00	4,645.71	7,423.76	4,640.49	59.88	61.03	59.11	-2,811.56	993.06	10.16	-5.56	15.72	0.646	Level 1<1.00
7,500.00	4,644.49	7,523.75	4,640.34	62.12	63.25	67.11	-2,882.85	1,063.17	10.67	-6.61	17.27	0.618	Level 1<1.00
7,600.00	4,644.48	7,623.68	4,640.18	64.38	65.46	72.14	-2,954.10	1,133.24	14.02	-6.14	20.16	0.695	Level 1<1.00
7,700.00	4,645.02	7,723.65	4,640.03	66.62	67.68	71.30	-3,025.37	1,203.34	15.56	-5.85	21.42	0.727	Level 1<1.00
7,800.00	4,644.85	7,823.64	4,639.87	68.86	69.90	69.43	-3,096.66	1,273.45	14.17	-6.24	20.41	0.694	Level 1<1.00
7,900.00	4,644.07	7,923.61	4,639.71	71.09	72.13	68.51	-3,167.94	1,343.55	11.87	-6.79	18.66	0.636	Level 1<1.00
8,000.00	4,642.60	8,023.58	4,639.56	73.32	74.36	70.60	-3,239.21	1,413.65	9.14	-9.91	19.06	0.480	Level 1<1.00
8,080.66	4,641.70	8,104.22	4,639.43	75.13	76.15	74.13	-3,296.71	1,470.20	8.31	-11.04	19.35	0.429	Level 1<1.00
8,100.00	4,641.45	8,123.57	4,639.40	75.56	76.58	75.62	-3,310.50	1,483.76	8.26	-11.27	19.52	0.423	Level 1<1.00
8,200.00	4,641.68	8,223.55	4,639.25	77.82	78.82	76.12	-3,381.78	1,553.86	10.14	-10.12	20.26	0.501	Level 1<1.00
8,300.00	4,641.76	8,323.54	4,639.09	80.06	81.05	74.40	-3,453.08	1,623.98	9.93	-10.28	20.21	0.491	Level 1<1.00
8,399.39	4,641.29	8,422.94	4,638.94	82.30	83.27	75.72	-3,523.94	1,693.67	9.55	-10.29	19.84	0.481	Level 1<1.00
8,400.00	4,641.33	8,423.54	4,638.94	82.31	83.28	75.19	-3,524.37	1,694.10	9.37	-11.31	20.68	0.453	Level 1<1.00
8,500.00	4,640.40	8,523.53	4,638.78	84.57	85.52	80.99	-3,595.66	1,764.21	10.40	-9.66	20.06	0.518	Level 1<1.00
8,600.00	4,639.83	8,623.48	4,638.62	86.83	87.76	84.84	-3,666.92	1,834.29	13.42	-7.34	20.76	0.646	Level 1<1.00
8,700.00	4,639.44	8,723.43	4,638.47	89.10	90.00	86.61	-3,738.18	1,904.38	16.33	-6.94	23.27	0.702	Level 1<1.00
8,800.00	4,640.98	8,823.35	4,638.31	91.37	92.24	82.35	-3,809.42	1,974.44	19.98	-5.03	25.01	0.799	Level 1<1.00
8,900.00	4,641.84	8,923.34	4,638.16	93.63	94.48	79.65	-3,880.71	2,044.56	20.54	-3.70	24.24	0.847	Level 1<1.00
9,000.00	4,642.86	9,023.29	4,638.00	95.87	96.72	74.47	-3,951.98	2,114.64	18.20	-5.93	24.13	0.754	Level 1<1.00
9,100.00	4,643.47	9,123.12	4,637.16	98.09	98.96	63.20	-4,023.14	2,184.64	14.00	-5.96	19.97	0.701	Level 1<1.00
9,200.00	4,643.91	9,222.94	4,636.24	100.31	101.21	41.10	-4,094.31	2,254.63	10.18	-6.33	16.51	0.617	Level 1<1.00
9,300.00	4,642.80	9,322.81	4,635.32	102.54	103.45	12.96	-4,165.50	2,324.66	7.67	-5.79	13.46	0.570	Level 1<1.00
9,398.73	4,640.50	9,421.46	4,634.41	104.75	105.67	-17.62	-4,235.83	2,393.84	6.39	-6.07	12.46	0.513	Level 1<1.00
9,400.00	4,640.48	9,422.72	4,634.40	104.77	105.70	-19.08	-4,236.74	2,394.72	6.43	-6.18	12.61	0.510	Level 1<1.00
9,500.00	4,638.46	9,522.67	4,633.48	107.01	107.95	-46.13	-4,307.99	2,464.80	7.19	-6.32	13.51	0.532	Level 1<1.00
9,600.00	4,636.50	9,622.63	4,632.56	109.26	110.20	-63.49	-4,379.25	2,534.89	8.83	-8.70	17.53	0.504	Level 1<1.00
9,700.00	4,634.87	9,722.60	4,631.64	111.51	112.46	-72.44	-4,450.52	2,604.99	10.71	-9.07	19.78	0.542	Level 1<1.00
9,800.00	4,633.72	9,822.57	4,630.72	113.75	114.71	-76.68	-4,521.79	2,675.09	13.03	-9.93	22.95	0.568	Level 1<1.00
9,900.00	4,633.01	9,922.52	4,629.80	116.00	116.97	-78.36	-4,593.05	2,745.18	15.93	-8.88	24.82	0.642	Level 1<1.00
10,000.00	4,632.61	10,022.47	4,628.88	118.24	119.22	-78.73	-4,664.30	2,815.26	19.13	-6.98	26.11	0.733	Level 1<1.00
10,100.00	4,632.33	10,122.43	4,627.96	120.49	121.48	-78.46	-4,735.57	2,885.35	21.87	-5.45	27.32	0.800	Level 1<1.00
10,200.00	4,630.93	10,222.43	4,627.04	122.75	123.73	-79.86	-4,806.85	2,955.47	22.10	-6.56	28.66	0.771	Level 1<1.00
10,269.65	4,630.08	10,292.08	4,626.39	124.33	125.31	-80.39	-4,856.51	3,004.31	22.09	-7.98	30.07	0.735	Level 1<1.00
10,300.00	4,629.85	10,322.43	4,626.12	125.02	125.99	-80.24	-4,878.15	3,025.59	22.04	-5.88	27.93	0.789	Level 1<1.00
10,400.00	4,628.70	10,422.43	4,625.19	127.28	128.25	-81.13	-4,949.43	3,095.71	22.74	-6.20	28.94	0.786	Level 1<1.00
10,500.00	4,627.55	10,522.41	4,624.27	129.54	130.51	-82.23	-5,020.72	3,165.82	24.27	-6.90	31.17	0.779	Level 1<1.00
10,600.00	4,626.66	10,622.41	4,623.35	131.80	132.77	-82.37	-5,092.00	3,235.93	24.88	-6.35	31.23	0.797	Level 1<1.00
10,700.00	4,626.32	10,722.40	4,622.43	134.07	135.04	-80.51	-5,163.28	3,306.04	23.59	-5.79	29.38	0.803	Level 1<1.00
10,800.00	4,625.59	10,822.39	4,621.51	136.35	137.30	-79.63	-5,234.57	3,376.16	22.68	-8.09	30.77	0.737	Level 1<1.00
10,900.00	4,624.56	10,922.39	4,620.59	138.62	139.56	-79.77	-5,305.86	3,446.28	22.38	-5.33	27.71	0.808	Level 1<1.00
10,930.53	4,624.29	10,952.92	4,620.31	139.31	140.25	-79.73	-5,327.63	3,467.68	22.31	-5.81	28.13	0.793	Level 1<1.00
11,000.00	4,623.95	11,022.38	4,619.67	140.89	141.83	-78.35	-5,377.15	3,516.39	21.19	-7.37	28.56	0.742	Level 1<1.00
11,100.00	4,623.92	11,122.35	4,618.75	143.18	144.09	-74.43	-5,448.42	3,586.49	19.29	-5.66	24.95	0.773	Level 1<1.00
11,200.00	4,623.83	11,222.33	4,617.83	145.46	146.35	-70.31	-5,519.69	3,656.59	17.81	-7.08	24.90	0.715	Level 1<1.00
11,300.00	4,624.25	11,322.29	4,616.91	147.74	148.62	-62.86	-5,590.96	3,726.69	16.11	-6.51	22.61	0.712	Level 1<1.00
11,400.00	4,624.72	11,422.24	4,615.98	150.03	150.88	-52.75	-5,662.21	3,796.77	14.44	-6.20	20.64	0.700	Level 1<1.00
11,500.00	4,624.82	11,522.18	4,615.06	152.31	153.15	-39.84	-5,733.46	3,866.85	12.71	-5.07	17.77	0.715	Level 1<1.00
11,600.00	4,624.62	11,622.13	4,614.14	154.60	155.42	-25.86	-5,804.71	3,936.93	11.64	-6.44	18.08	0.644	Level 1<1.00

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 048H - Original Hole - rev4												Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2646-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Rule Assigned:											
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Distance Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
11,700.00	4,623.02	11,722.11	4,613.22	156.89	157.68	-18.59	-5,875.99	4,007.04	10.33	-7.63	17.96	0.575	Level 1<1.00
11,800.00	4,620.57	11,822.06	4,612.30	159.17	159.95	-4.65	-5,947.25	4,077.12	8.29	-8.64	16.93	0.490	Level 1<1.00
11,887.98	4,618.09	11,909.95	4,611.49	161.19	161.94	23.29	-6,009.91	4,138.75	7.19	-8.31	15.50	0.464	Level 1<1.00
11,900.00	4,617.69	11,921.96	4,611.38	161.47	162.22	28.34	-6,018.47	4,147.17	7.17	-9.60	16.77	0.428	Level 1<1.00
12,000.00	4,614.62	12,021.77	4,610.46	163.77	164.48	65.27	-6,089.63	4,217.16	9.99	-12.84	22.83	0.437	Level 1<1.00, ES
12,100.00	4,610.86	12,121.46	4,609.54	166.08	166.74	85.21	-6,160.70	4,287.06	16.46	-10.67	27.13	0.607	Level 1<1.00
12,200.00	4,606.49	12,180.53	4,609.00	167.87	168.08	91.74	-6,202.81	4,328.48	47.52	36.87	10.65	4.463	
12,201.00	4,606.44	12,180.53	4,609.00	167.89	168.08	91.74	-6,202.81	4,328.48	48.41	38.77	9.64	5.022	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 049H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2694-MWD, 11175-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	47.56	13.48	14.74	19.97				
100.00	100.00	100.01	100.01	0.13	0.17	99.61	13.51	14.68	19.96	19.66	0.30	65.906	
200.00	200.00	200.02	200.02	0.31	0.34	99.71	13.60	14.50	19.93	19.28	0.65	30.634	
300.00	300.00	300.03	300.03	0.49	0.51	99.88	13.76	14.20	19.88	18.88	1.00	19.910	
400.00	400.00	400.04	400.04	0.67	0.67	100.11	13.97	13.79	19.80	18.46	1.35	14.711	
500.00	499.99	500.00	500.00	1.00	1.00	87.51	14.29	13.34	19.73	17.73	2.00	9.850	
514.14	514.13	514.14	514.13	1.05	1.05	90.70	14.35	13.29	19.73	17.63	2.10	9.375 CC	
600.00	599.99	600.04	600.04	1.36	1.36	109.16	14.60	12.94	19.74	17.03	2.72	7.261	
700.00	699.99	700.02	700.01	1.72	1.72	131.05	14.90	12.46	20.05	16.61	3.43	5.837	
800.00	799.98	800.00	800.00	2.07	2.08	146.37	15.25	12.10	20.65	16.50	4.15	4.979 ES	
900.00	899.98	900.03	900.02	2.43	2.43	162.32	15.41	11.76	21.40	16.54	4.86	4.404	
1,000.00	999.85	999.91	999.90	2.79	2.78	165.96	15.34	11.60	25.76	20.19	5.56	4.629	
1,100.00	1,099.31	1,099.41	1,099.40	3.16	3.13	172.17	15.28	11.36	35.64	29.36	6.28	5.677	
1,200.00	1,198.17	1,198.27	1,198.27	3.54	3.49	179.64	15.34	11.05	50.35	43.35	6.99	7.199	
1,300.00	1,296.24	1,296.36	1,296.35	3.95	3.84	-174.03	15.58	10.73	69.67	61.96	7.71	9.038	
1,400.00	1,393.27	1,393.61	1,393.60	4.39	4.18	-171.24	15.66	10.43	93.42	85.00	8.42	11.095	
1,500.00	1,489.00	1,493.36	1,493.33	4.88	4.54	-174.13	14.97	9.11	120.63	111.49	9.14	13.200	
1,600.00	1,583.31	1,597.41	1,597.16	5.42	4.91	-178.81	11.59	3.34	147.75	137.89	9.86	14.984	
1,700.00	1,676.66	1,703.99	1,702.88	6.01	5.30	178.85	5.04	-8.27	171.79	161.21	10.58	16.243	
1,800.00	1,769.99	1,811.70	1,808.78	6.63	5.72	177.60	-4.17	-25.53	190.48	179.19	11.29	16.870	
1,900.00	1,863.43	1,920.35	1,914.38	7.26	6.16	176.34	-16.37	-47.95	203.55	191.54	12.01	16.950	
2,000.00	1,956.98	2,021.56	2,012.08	7.90	6.61	175.04	-29.32	-71.00	213.65	200.87	12.77	16.727	
2,100.00	2,050.92	2,120.28	2,107.37	8.54	7.06	174.01	-41.84	-93.53	222.66	209.10	13.56	16.422	
2,200.00	2,145.21	2,220.05	2,203.70	9.18	7.54	175.05	-54.27	-116.34	230.87	216.52	14.35	16.088	
2,300.00	2,239.47	2,320.50	2,300.61	9.82	8.03	174.23	-66.74	-139.61	239.03	223.88	15.15	15.777	
2,400.00	2,333.71	2,421.01	2,397.44	10.47	8.53	173.30	-79.12	-163.57	246.90	230.94	15.96	15.466	
2,500.00	2,428.17	2,520.53	2,493.26	11.11	9.04	172.56	-91.42	-187.50	254.02	237.23	16.79	15.129	
2,600.00	2,523.15	2,620.14	2,589.21	11.74	9.51	171.58	-103.63	-211.31	259.79	242.21	17.58	14.780	
2,700.00	2,618.35	2,719.18	2,684.63	12.26	9.81	171.31	-116.41	-234.55	264.74	246.66	18.08	14.643	
2,800.00	2,713.54	2,813.59	2,775.66	12.66	10.00	168.09	-125.68	-257.77	271.36	253.01	18.35	14.790	
2,900.00	2,807.58	2,910.47	2,869.22	13.00	10.20	162.94	-133.47	-281.68	282.28	263.76	18.52	15.241	
3,000.00	2,900.51	3,011.03	2,966.55	13.40	10.44	163.66	-141.48	-305.68	296.66	277.94	18.72	15.847	
3,100.00	2,993.55	3,115.85	3,067.36	13.83	10.73	164.74	-150.85	-332.80	309.03	290.05	18.98	16.283	
3,200.00	3,087.03	3,214.16	3,161.88	14.27	11.03	163.66	-160.21	-358.14	320.11	300.80	19.31	16.578	
3,300.00	3,180.19	3,311.31	3,255.55	14.73	11.34	163.02	-169.84	-382.04	332.33	312.68	19.65	16.913	
3,400.00	3,274.17	3,407.63	3,348.75	15.21	11.66	162.81	-179.59	-404.31	343.36	323.34	20.02	17.149	
3,500.00	3,367.41	3,509.63	3,447.76	15.71	11.99	161.05	-190.30	-426.32	356.76	336.39	20.37	17.513	
3,600.00	3,459.96	3,636.66	3,569.51	16.25	12.41	164.16	-220.51	-443.97	365.75	345.43	20.32	17.999	
3,700.00	3,552.80	3,741.06	3,665.62	16.80	12.74	170.62	-260.97	-446.22	371.40	351.20	20.20	18.385	
3,800.00	3,646.16	3,828.59	3,742.57	17.35	12.99	176.52	-302.17	-440.16	379.21	358.84	20.37	18.612	
3,900.00	3,739.94	3,907.28	3,809.96	17.88	13.22	-175.65	-341.61	-430.50	392.73	371.90	20.83	18.851	
4,000.00	3,835.14	3,982.00	3,871.60	18.38	13.45	-170.35	-381.74	-417.44	409.81	388.29	21.52	19.043	
4,100.00	3,930.20	4,045.00	3,921.14	18.89	13.65	-164.28	-417.65	-402.50	437.07	414.84	22.23	19.665	
4,200.00	4,022.81	4,096.83	3,959.95	19.48	13.82	-135.52	-448.19	-386.81	477.42	454.79	22.63	21.100	
4,300.00	4,111.34	4,152.67	3,999.84	20.09	14.00	-113.75	-481.74	-366.81	522.93	500.00	22.93	22.805	
4,400.00	4,198.24	4,217.27	4,042.78	20.62	14.24	-97.04	-522.14	-340.45	564.11	540.73	23.38	24.125	
4,500.00	4,283.14	4,286.13	4,084.15	21.06	14.55	-83.49	-567.85	-309.81	600.05	576.10	23.95	25.056	
4,600.00	4,364.26	4,366.83	4,128.51	21.45	15.02	-75.72	-623.82	-272.25	630.69	605.75	24.94	25.286	
4,700.00	4,437.42	4,429.25	4,160.78	21.88	15.47	-71.17	-667.71	-241.82	659.01	633.67	25.34	26.012	
4,800.00	4,499.34	4,485.00	4,185.70	22.38	15.94	-67.03	-707.92	-212.34	686.49	660.89	25.59	26.822	
4,900.00	4,549.41	4,532.48	4,203.64	22.91	16.40	-63.92	-742.42	-185.11	710.00	684.30	25.70	27.630	
5,000.00	4,592.10	4,580.00	4,218.42	23.42	16.91	-59.69	-776.77	-155.81	727.99	702.10	25.89	28.116	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design:		Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 049H - Original Hole - Surveys Original Hole											Offset Site Error:		0.00 ft		
Survey Program:		416-MWD, 2694-MWD, 11175-MWD								Rule Assigned:				Offset Well Error:		0.00 ft	
Reference	Offset	Semi Major Axis								Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning				
5,100.00	4,620.02	4,634.73	4,231.48	23.90	17.56	-57.28	-816.12	-120.11	734.08	707.53	26.55	27.645					
5,200.00	4,632.31	4,695.60	4,240.52	24.41	18.36	-57.33	-860.04	-78.98	731.16	703.40	27.75	26.344					
5,300.00	4,637.77	4,775.81	4,245.76	25.07	19.54	-57.36	-918.72	-24.57	728.71	698.84	29.87	24.397					
5,400.00	4,639.18	4,862.00	4,249.16	25.92	20.94	-57.46	-981.62	34.26	725.54	693.17	32.37	22.412					
5,500.00	4,639.23	4,957.00	4,251.18	26.98	22.59	-57.57	-1,050.75	99.39	723.51	688.14	35.37	20.453					
5,542.66	4,639.01	4,990.32	4,251.49	27.49	23.19	-57.60	-1,074.84	122.41	723.17	686.53	36.63	19.740					
5,600.00	4,638.86	5,035.01	4,251.50	28.24	24.01	-57.64	-1,106.76	153.68	723.67	685.93	37.74	19.176					
5,700.00	4,639.03	5,120.93	4,250.41	29.67	25.63	-57.57	-1,167.22	214.72	728.02	687.52	40.51	17.973					
5,800.00	4,638.74	5,210.24	4,248.09	31.24	27.36	-57.89	-1,229.40	278.78	734.43	690.89	43.54	16.867					
5,900.00	4,641.22	5,351.17	4,245.74	32.91	30.18	-57.57	-1,328.46	378.96	737.93	689.15	48.78	15.128					
5,902.36	4,641.27	5,346.06	4,245.63	32.95	30.08	-57.57	-1,324.77	375.42	737.98	689.45	48.53	15.207					
6,000.00	4,642.45	5,438.55	4,245.64	34.67	31.98	-57.51	-1,390.85	440.13	738.87	687.13	51.74	14.281					
6,100.00	4,642.17	5,529.56	4,244.07	36.51	33.87	-57.49	-1,455.85	503.83	741.06	686.15	54.90	13.497					
6,200.00	4,643.36	5,620.22	4,240.52	38.40	35.78	-57.19	-1,520.42	567.35	743.23	685.35	57.88	12.842					
6,300.00	4,644.93	5,749.28	4,239.61	40.35	38.52	-56.86	-1,612.99	657.25	741.80	679.13	62.67	11.837					
6,400.00	4,644.27	5,840.32	4,240.14	42.33	40.48	-56.88	-1,678.14	720.83	739.71	673.80	65.90	11.224					
6,500.00	4,646.36	5,943.59	4,239.32	44.36	42.71	-56.50	-1,751.94	793.05	738.63	669.16	69.47	10.632					
6,600.00	4,649.49	6,048.49	4,241.64	46.41	44.99	-56.21	-1,826.85	866.45	735.60	662.43	73.17	10.053					
6,700.00	4,652.08	6,141.77	4,242.80	48.48	47.03	-55.97	-1,893.34	931.86	731.94	655.69	76.24	9.600					
6,800.00	4,650.97	6,234.74	4,242.19	50.59	49.07	-55.96	-1,959.82	996.85	730.11	650.62	79.50	9.184					
6,900.00	4,649.40	6,346.64	4,240.91	52.72	51.53	-55.91	-2,039.79	1,075.10	728.68	645.03	83.64	8.712					
7,000.00	4,648.08	6,445.42	4,243.29	54.86	53.72	-56.05	-2,110.15	1,144.39	724.82	637.46	87.36	8.297					
7,100.00	4,647.03	6,535.61	4,244.59	57.02	55.72	-56.10	-2,173.95	1,208.12	721.51	630.94	90.57	7.966					
7,200.00	4,646.32	6,628.28	4,244.33	59.19	57.78	-56.07	-2,239.27	1,273.85	720.26	626.43	93.82	7.677					
7,251.03	4,646.11	6,674.89	4,243.64	60.30	58.82	-56.03	-2,272.11	1,306.93	720.21	624.81	95.40	7.549					
7,300.00	4,646.06	6,718.41	4,242.63	61.37	59.79	-55.95	-2,302.66	1,337.90	720.46	623.65	96.81	7.442					
7,400.00	4,645.71	6,852.45	4,242.14	63.55	62.79	-55.88	-2,397.24	1,432.83	719.36	617.32	102.03	7.050					
7,500.00	4,644.49	6,945.76	4,244.88	65.75	64.87	-56.10	-2,463.51	1,498.46	716.39	610.79	105.60	6.784					
7,600.00	4,644.48	7,036.13	4,246.49	67.96	66.90	-56.05	-2,527.33	1,562.43	713.28	604.54	108.74	6.560					
7,650.75	4,644.87	7,082.48	4,246.65	69.08	67.94	-56.02	-2,559.99	1,595.31	712.53	602.26	110.27	6.462					
7,700.00	4,645.02	7,124.00	4,246.35	70.17	68.87	-56.01	-2,589.25	1,624.77	713.50	601.84	111.66	6.390					
7,800.00	4,644.85	7,219.90	4,244.41	72.37	71.03	-56.00	-2,656.72	1,692.89	716.86	601.80	115.06	6.230					
7,900.00	4,644.07	7,337.56	4,244.77	74.58	73.68	-56.26	-2,739.33	1,776.66	719.30	599.37	119.93	5.998					
8,000.00	4,642.60	7,428.96	4,246.34	76.80	75.75	-56.64	-2,803.12	1,842.08	721.30	597.64	123.66	5.833					
8,100.00	4,641.45	7,516.96	4,246.87	79.02	77.74	-56.93	-2,863.91	1,905.71	723.48	596.45	127.03	5.695					
8,200.00	4,641.68	7,614.26	4,246.00	81.25	79.95	-56.97	-2,930.44	1,976.71	725.95	595.38	130.57	5.560					
8,300.00	4,641.76	7,742.89	4,244.62	83.48	82.85	-56.86	-3,022.28	2,066.73	726.37	590.83	135.53	5.359					
8,400.00	4,641.33	7,834.05	4,242.98	85.72	84.91	-56.75	-3,087.96	2,129.92	726.63	588.11	138.52	5.246					
8,500.00	4,640.40	7,922.81	4,240.24	87.96	86.91	-56.58	-3,151.34	2,192.01	726.64	585.42	141.22	5.146					
8,600.00	4,639.83	8,051.56	4,236.27	90.21	89.82	-56.20	-3,243.26	2,282.04	725.63	580.04	145.59	4.984					
8,700.00	4,639.44	8,152.11	4,236.30	92.47	92.08	-55.92	-3,316.74	2,350.68	720.82	572.10	148.72	4.847					
8,800.00	4,640.98	8,270.84	4,237.74	94.72	94.74	-55.61	-3,403.85	2,431.33	715.59	563.23	152.36	4.697					
8,900.00	4,641.84	8,362.28	4,239.97	96.97	96.80	-55.61	-3,470.85	2,493.52	711.98	556.62	155.36	4.583					
8,944.09	4,642.30	8,402.63	4,240.85	97.96	97.71	-55.65	-3,500.18	2,521.21	711.58	554.81	156.76	4.539					
9,000.00	4,642.86	8,453.77	4,241.89	99.21	98.86	-55.74	-3,537.14	2,556.54	712.18	553.52	158.66	4.489					
9,100.00	4,643.47	8,544.95	4,243.30	101.43	100.92	-55.97	-3,602.53	2,620.07	715.31	553.07	162.24	4.409					
9,200.00	4,643.91	8,634.01	4,243.93	103.65	102.94	-56.21	-3,665.72	2,682.83	720.38	554.59	165.79	4.345					
9,300.00	4,642.80	8,731.12	4,243.78	105.87	105.15	-56.53	-3,734.26	2,751.62	724.84	555.01	169.84	4.268					
9,400.00	4,640.48	8,822.00	4,242.69	108.11	107.22	-56.78	-3,798.44	2,815.96	728.25	554.80	173.45	4.199					
9,500.00	4,638.46	8,916.00	4,240.43	110.35	109.36	-56.98	-3,864.33	2,882.95	732.44	555.40	177.04	4.137					
9,600.00	4,636.50	9,056.21	4,240.11	112.59	112.54	-57.27	-3,964.88	2,980.63	732.93	549.85	183.08	4.003					
9,700.00	4,634.87	9,149.46	4,240.89	114.84	114.64	-57.44	-4,032.57	3,044.76	731.98	545.32	186.65	3.922					

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 049H - Original Hole - Surveys Original Hole											Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2694-MWD, 11175-MWD											Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning				
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor
9,713.39	4,634.69	9,161.40	4,240.92	115.14	114.91	-57.45	-4,041.20	3,053.01	731.96	544.86	187.09	3.912
9,800.00	4,633.72	9,240.60	4,240.57	117.08	116.71	-57.53	-4,098.24	3,107.96	732.70	542.72	189.98	3.857
9,900.00	4,633.01	9,334.58	4,239.28	119.33	118.84	-57.58	-4,165.65	3,173.43	735.00	541.68	193.31	3.802
10,000.00	4,632.61	9,445.71	4,237.71	121.57	121.36	-57.64	-4,245.16	3,251.04	737.95	540.44	197.51	3.736
10,100.00	4,632.33	9,550.82	4,240.86	123.82	123.75	-57.98	-4,320.21	3,324.56	738.26	536.21	202.05	3.654
10,200.00	4,630.93	9,642.58	4,243.40	126.08	125.83	-58.27	-4,385.32	3,389.17	736.71	530.89	205.82	3.579
10,275.34	4,630.02	9,711.17	4,244.61	127.78	127.40	-58.43	-4,433.70	3,437.77	736.25	527.73	208.52	3.531
10,300.00	4,629.85	9,733.63	4,244.89	128.34	127.91	-58.47	-4,449.49	3,453.75	736.25	526.89	209.36	3.517
10,400.00	4,628.70	9,826.07	4,245.34	130.60	130.02	-58.66	-4,514.20	3,519.75	737.57	524.59	212.97	3.463
10,500.00	4,627.55	9,915.89	4,244.40	132.86	132.08	-58.79	-4,576.89	3,584.07	740.68	524.39	216.29	3.425
10,600.00	4,626.66	10,002.89	4,242.01	135.12	134.07	-58.87	-4,637.05	3,646.87	744.72	525.67	219.04	3.400
10,700.00	4,626.32	10,137.08	4,238.05	137.39	137.14	-58.71	-4,730.08	3,743.47	747.64	523.19	224.45	3.331
10,787.34	4,625.71	10,217.31	4,237.42	139.38	138.97	-58.68	-4,787.19	3,799.82	747.07	520.08	226.99	3.291
10,800.00	4,625.59	10,228.49	4,237.28	139.67	139.23	-58.68	-4,795.09	3,807.72	747.10	519.77	227.33	3.286
10,900.00	4,624.56	10,317.62	4,235.32	141.94	141.26	-58.64	-4,857.86	3,870.97	748.49	518.43	230.06	3.253
11,000.00	4,623.95	10,446.22	4,234.68	144.21	144.19	-58.63	-4,948.81	3,961.85	748.00	512.84	235.16	3.181
11,100.00	4,623.92	10,541.47	4,236.59	146.49	146.37	-58.69	-5,016.45	4,028.89	745.43	506.96	238.46	3.126
11,200.00	4,623.83	10,631.82	4,237.13	148.77	148.43	-58.69	-5,080.33	4,092.77	744.23	502.90	241.33	3.084
11,300.00	4,624.25	10,732.54	4,235.99	151.05	150.72	-58.52	-5,151.51	4,164.03	743.71	499.43	244.28	3.045
11,400.00	4,624.72	10,844.73	4,232.89	153.34	153.26	-58.05	-5,233.33	4,240.71	740.86	494.05	246.81	3.002
11,500.00	4,624.82	10,932.77	4,229.43	155.62	155.25	-57.60	-5,297.51	4,300.87	738.14	490.22	247.92	2.977
11,594.53	4,624.45	11,015.71	4,225.29	157.79	157.13	-57.22	-5,357.27	4,358.24	737.20	488.25	248.95	2.961
11,600.00	4,624.62	11,020.48	4,225.02	157.91	157.24	-57.17	-5,360.68	4,361.56	737.17	488.23	248.94	2.961
11,700.00	4,623.02	11,111.06	4,219.24	160.19	159.14	-56.81	-5,425.21	4,424.87	738.17	487.91	250.26	2.950 SF
11,800.00	4,620.57	11,175.00	4,214.90	162.48	160.18	-56.59	-5,470.61	4,469.68	739.38	490.17	249.21	2.967
11,900.00	4,617.69	11,175.00	4,214.90	164.78	160.18	-56.66	-5,470.61	4,469.68	749.83	510.21	239.61	3.129
12,000.00	4,614.62	11,175.00	4,214.90	167.08	160.18	-56.76	-5,470.61	4,469.68	771.79	546.65	225.14	3.428
12,100.00	4,610.86	11,175.00	4,214.90	169.38	160.18	-56.81	-5,470.61	4,469.68	804.04	596.11	207.93	3.867
12,200.00	4,606.49	11,175.00	4,214.90	171.21	160.18	-56.82	-5,470.61	4,469.68	845.90	656.38	189.52	4.463
12,201.00	4,606.44	11,175.00	4,214.90	171.23	160.18	-56.82	-5,470.61	4,469.68	846.37	657.03	189.33	4.470



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 050H - Original Hole - Surveys Original Hole													Offset Site Error: 0.00 ft
Survey Program: 416-MWD, 2565-MWD, 12156-MWD													Offset Well Error: 0.00 ft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	48.23	26.59	29.78	39.92				
100.00	100.00	99.93	99.93	0.13	0.17	100.17	26.75	29.75	40.02	39.72	0.30	132.099	
200.00	200.00	199.87	199.87	0.31	0.34	99.91	27.21	29.66	40.31	39.65	0.65	61.940	ES
300.00	300.00	299.80	299.80	0.49	0.51	99.49	27.98	29.52	40.78	39.78	1.00	40.844	
400.00	400.00	399.73	399.72	0.67	0.67	98.92	29.07	29.32	41.45	40.11	1.35	30.791	
500.00	499.99	499.55	499.52	1.00	1.00	85.06	30.56	29.10	42.35	40.35	2.00	21.141	
600.00	599.99	599.56	599.52	1.36	1.36	104.85	32.36	28.91	43.53	40.81	2.72	16.003	
700.00	699.99	699.77	699.72	1.72	1.72	125.76	33.64	28.79	44.75	41.31	3.44	13.019	
800.00	799.98	799.81	799.76	2.07	2.08	140.83	34.49	28.73	45.90	41.75	4.15	11.058	
900.00	899.98	899.90	899.85	2.43	2.44	156.59	35.14	28.63	47.16	42.29	4.86	9.695	
1,000.00	999.85	999.80	999.75	2.79	2.79	158.86	35.52	28.51	51.69	46.11	5.58	9.266	
1,100.00	1,099.31	1,099.19	1,099.14	3.16	3.15	164.33	35.99	28.45	61.73	55.43	6.30	9.801	
1,200.00	1,198.17	1,198.00	1,197.94	3.54	3.50	172.73	36.45	28.42	76.67	69.65	7.02	10.928	
1,300.00	1,296.24	1,295.82	1,295.77	3.95	3.85	-179.17	36.89	28.55	96.50	88.77	7.73	12.486	
1,400.00	1,393.27	1,392.41	1,392.35	4.39	4.20	-174.82	37.44	28.88	121.23	112.80	8.44	14.371	
1,500.00	1,489.00	1,487.66	1,487.60	4.88	4.53	-176.59	38.15	29.36	150.81	141.67	9.14	16.499	
1,600.00	1,583.31	1,582.41	1,582.35	5.42	4.87	179.54	38.88	29.77	184.81	174.96	9.85	18.766	
1,700.00	1,676.66	1,676.14	1,676.07	6.01	5.21	178.02	39.30	29.80	220.93	210.38	10.55	20.938	
1,800.00	1,769.99	1,769.64	1,769.57	6.63	5.54	177.80	39.70	29.76	257.06	245.80	11.25	22.842	
1,900.00	1,863.43	1,863.18	1,863.11	7.26	5.88	177.63	40.07	29.59	292.76	280.80	11.96	24.880	
2,000.00	1,956.98	1,962.81	1,962.74	7.90	6.23	177.13	40.50	28.63	327.63	314.93	12.70	25.400	
2,100.00	2,050.92	2,069.19	2,068.99	8.54	6.60	176.42	41.00	23.58	358.67	345.20	13.47	26.631	
2,200.00	2,145.21	2,170.11	2,169.54	9.18	6.95	177.65	41.96	15.11	386.36	372.15	14.22	27.176	
2,300.00	2,239.47	2,266.69	2,265.69	9.82	7.30	176.96	43.13	6.05	413.63	398.68	14.96	27.655	
2,400.00	2,333.71	2,363.53	2,362.08	10.47	7.64	176.31	44.23	-3.10	440.96	425.26	15.70	28.082	
2,500.00	2,428.17	2,460.13	2,458.25	11.11	7.99	175.97	45.08	-12.18	467.57	451.12	16.45	28.424	
2,600.00	2,523.15	2,557.44	2,555.14	11.74	8.19	175.46	45.66	-21.19	492.57	475.53	17.04	28.903	
2,700.00	2,618.35	2,655.28	2,652.57	12.26	8.23	175.56	46.02	-30.25	516.77	499.38	17.39	29.713	
2,800.00	2,713.54	2,751.59	2,748.47	12.66	8.27	173.16	46.24	-39.01	541.07	523.49	17.58	30.777	
2,900.00	2,807.58	2,847.67	2,844.18	13.00	8.33	168.61	46.14	-47.47	568.45	550.78	17.67	32.168	
3,000.00	2,900.51	2,942.42	2,938.60	13.40	8.41	170.00	45.71	-55.39	598.73	580.93	17.80	33.637	
3,100.00	2,993.55	3,038.17	3,034.03	13.83	8.50	172.13	45.10	-63.19	629.00	611.04	17.96	35.028	
3,200.00	3,087.03	3,133.32	3,128.86	14.27	8.60	171.86	44.34	-70.89	658.13	639.99	18.14	36.274	
3,300.00	3,180.19	3,228.39	3,223.64	14.73	8.72	171.69	43.49	-78.31	688.15	669.79	18.36	37.483	
3,400.00	3,274.17	3,323.92	3,318.89	15.21	8.84	171.91	42.39	-85.52	716.06	697.46	18.60	38.490	
3,500.00	3,367.41	3,422.21	3,416.91	15.71	8.99	170.03	40.91	-92.70	745.76	726.88	18.88	39.490	
3,600.00	3,459.96	3,519.62	3,514.03	16.25	9.15	170.19	38.99	-100.02	776.68	757.49	19.19	40.467	
3,700.00	3,552.80	3,612.68	3,606.81	16.80	9.30	171.63	36.86	-106.77	806.93	787.42	19.51	41.360	
3,800.00	3,646.16	3,713.83	3,707.71	17.35	9.49	171.93	33.46	-113.12	835.91	816.05	19.86	42.080	
3,900.00	3,739.94	3,782.14	3,775.87	17.88	9.61	174.49	31.12	-116.78	864.51	844.38	20.14	42.928	
4,000.00	3,835.14	3,850.65	3,844.36	18.38	9.73	174.29	30.17	-117.88	892.87	872.47	20.40	43.765	
4,100.00	3,930.20	3,940.83	3,934.54	18.89	9.89	175.40	29.57	-118.17	923.12	902.36	20.76	44.471	
4,200.00	4,022.81	4,034.57	4,028.28	19.48	10.06	-160.59	28.97	-118.27	959.64	938.47	21.17	45.327	
4,300.00	4,111.34	4,125.96	4,119.28	20.09	10.22	-142.13	23.09	-113.67	1,000.52	978.97	21.56	46.415	
4,400.00	4,198.24	4,212.15	4,203.43	20.62	10.36	-127.54	9.26	-101.52	1,036.38	1,014.50	21.88	47.375	
4,500.00	4,283.14	4,284.76	4,271.96	21.06	10.47	-115.81	-7.81	-84.84	1,067.40	1,045.25	22.15	48.199	
4,600.00	4,364.26	4,353.88	4,334.40	21.45	10.58	-110.44	-27.63	-62.89	1,096.47	1,074.03	22.44	48.864	
4,700.00	4,437.42	4,444.33	4,410.74	21.88	10.73	-107.15	-59.53	-26.51	1,128.23	1,105.30	22.93	49.197	
4,800.00	4,499.34	4,601.29	4,523.55	22.38	11.35	-103.39	-135.12	51.22	1,160.03	1,135.85	24.19	47.962	
4,900.00	4,549.41	4,701.26	4,578.25	22.91	12.10	-99.62	-195.61	108.78	1,186.62	1,161.08	25.54	46.455	
5,000.00	4,592.10	4,793.26	4,618.81	23.42	13.04	-94.50	-254.92	166.18	1,205.34	1,178.08	27.26	44.223	
5,100.00	4,620.02	4,870.34	4,644.78	23.90	14.00	-91.70	-306.16	217.51	1,214.53	1,185.37	29.16	41.656	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 050H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2565-MWD, 12156-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,200.00	4,632.31	4,982.79	4,665.59	24.41	15.65	-91.66	-382.84	296.75	1,217.93	1,185.71	32.22	37.795	
5,300.00	4,637.77	5,085.91	4,669.68	25.07	17.36	-91.53	-455.22	370.06	1,220.14	1,184.64	35.50	34.366	
5,400.00	4,639.18	5,170.00	4,667.79	25.92	18.87	-91.36	-513.83	430.34	1,222.60	1,184.07	38.53	31.727	
5,500.00	4,639.23	5,247.56	4,665.35	26.98	20.32	-91.19	-566.90	486.84	1,227.49	1,185.94	41.55	29.543	
5,600.00	4,638.86	5,394.38	4,663.40	28.24	23.20	-91.15	-669.21	592.11	1,230.93	1,184.26	46.67	26.375	
5,700.00	4,639.03	5,482.24	4,661.41	29.67	24.97	-90.96	-731.26	654.28	1,234.81	1,184.59	50.21	24.592	
5,800.00	4,638.74	5,603.43	4,659.84	31.24	27.48	-90.98	-816.18	740.70	1,240.47	1,185.56	54.91	22.591	
5,900.00	4,641.22	5,698.62	4,661.12	32.91	29.47	-90.91	-884.07	807.42	1,240.15	1,181.26	58.90	21.056	
5,913.79	4,641.52	5,711.00	4,661.27	33.14	29.73	-90.91	-892.86	816.14	1,240.12	1,180.70	59.42	20.869	
6,000.00	4,642.45	5,799.36	4,661.24	34.67	31.61	-90.87	-955.58	878.38	1,241.08	1,177.98	63.11	19.666	
6,100.00	4,642.17	5,879.69	4,659.56	36.51	33.34	-90.80	-1,012.21	935.32	1,244.02	1,177.32	66.71	18.649	
6,200.00	4,643.36	6,029.76	4,656.86	38.40	36.58	-90.57	-1,119.19	1,040.49	1,243.30	1,170.72	72.58	17.130	
6,300.00	4,644.93	6,130.75	4,655.35	40.35	38.77	-90.47	-1,192.73	1,109.69	1,238.80	1,161.88	76.92	16.104	
6,400.00	4,644.27	6,218.85	4,653.37	42.33	40.69	-90.42	-1,256.67	1,170.26	1,235.64	1,154.74	80.89	15.275	
6,500.00	4,646.36	6,301.29	4,654.97	44.36	42.50	-90.34	-1,315.66	1,227.81	1,232.27	1,147.56	84.71	14.548	
6,600.00	4,649.49	6,392.35	4,657.23	46.41	44.51	-90.29	-1,380.23	1,291.99	1,228.76	1,139.93	88.83	13.833	
6,700.00	4,652.08	6,484.01	4,658.60	48.48	46.55	-90.30	-1,444.72	1,357.11	1,224.73	1,131.74	92.99	13.171	
6,777.83	4,651.93	6,561.62	4,658.82	50.12	48.28	-90.32	-1,499.18	1,412.40	1,223.94	1,127.50	96.44	12.691	
6,800.00	4,650.97	6,582.82	4,658.70	50.59	48.75	-90.36	-1,514.04	1,427.51	1,224.75	1,127.35	97.40	12.575	
6,900.00	4,649.40	6,679.44	4,656.96	52.72	50.91	-90.35	-1,581.64	1,496.52	1,225.35	1,123.61	101.74	12.044	
7,000.00	4,648.08	6,780.56	4,653.43	54.86	53.18	-90.26	-1,652.27	1,568.80	1,225.11	1,118.86	106.24	11.531	
7,100.00	4,647.03	6,874.10	4,652.95	57.02	55.29	-90.28	-1,717.72	1,635.62	1,223.90	1,113.39	110.51	11.075	
7,117.38	4,646.89	6,887.71	4,653.06	57.39	55.59	-90.29	-1,727.18	1,645.40	1,223.85	1,112.69	111.16	11.010	
7,200.00	4,646.32	6,956.07	4,653.89	59.19	57.14	-90.35	-1,774.25	1,694.97	1,224.80	1,110.44	114.36	10.710	
7,300.00	4,646.06	7,063.96	4,654.33	61.37	59.59	-90.39	-1,848.16	1,773.57	1,226.52	1,107.35	119.17	10.292	
7,384.81	4,645.73	7,169.42	4,657.78	63.22	61.97	-90.56	-1,921.77	1,849.09	1,226.17	1,102.44	123.73	9.910	
7,400.00	4,645.71	7,185.03	4,658.36	63.55	62.32	-90.59	-1,932.73	1,860.10	1,225.90	1,101.46	124.43	9.852	
7,500.00	4,644.49	7,277.36	4,661.26	65.75	64.41	-90.78	-1,997.45	1,925.89	1,226.50	1,097.82	128.68	9.532	
7,600.00	4,644.48	7,430.84	4,664.20	67.96	67.87	-90.89	-2,106.64	2,033.66	1,223.32	1,088.36	134.96	9.064	
7,700.00	4,645.02	7,525.12	4,665.20	70.17	69.98	-90.95	-2,175.08	2,098.51	1,220.06	1,080.78	139.28	8.760	
7,800.00	4,644.85	7,628.48	4,664.36	72.37	72.29	-90.92	-2,250.23	2,169.45	1,219.47	1,075.62	143.86	8.477	
7,819.77	4,644.75	7,646.63	4,663.98	72.81	72.70	-90.90	-2,263.42	2,181.92	1,219.44	1,074.75	144.69	8.428	
7,900.00	4,644.07	7,715.22	4,661.99	74.58	74.24	-90.83	-2,313.02	2,229.25	1,220.08	1,072.16	147.92	8.248	
8,000.00	4,642.60	7,795.11	4,659.25	76.80	76.05	-90.76	-2,369.91	2,285.27	1,222.51	1,070.77	151.74	8.056	
8,100.00	4,641.45	7,913.71	4,654.56	79.02	78.73	-90.62	-2,454.10	2,368.67	1,223.53	1,066.66	156.88	7.799	
8,200.00	4,641.68	8,038.40	4,652.92	81.25	81.53	-90.52	-2,544.98	2,454.02	1,219.24	1,057.09	162.15	7.519	
8,300.00	4,641.76	8,143.10	4,652.60	83.48	83.88	-90.51	-2,621.79	2,525.17	1,216.53	1,049.74	166.79	7.294	
8,400.00	4,641.33	8,233.98	4,651.87	85.72	85.92	-90.51	-2,688.44	2,586.94	1,214.09	1,043.07	171.02	7.099	
8,500.00	4,640.40	8,329.25	4,649.97	87.96	88.06	-90.47	-2,757.80	2,652.23	1,210.67	1,035.28	175.39	6.903	
8,600.00	4,639.83	8,412.01	4,648.29	90.21	89.93	-90.42	-2,817.66	2,709.35	1,206.08	1,026.70	179.38	6.724	
8,700.00	4,639.44	8,505.13	4,648.29	92.47	92.04	-90.40	-2,884.14	2,774.55	1,202.99	1,019.29	183.70	6.549	
8,800.00	4,640.98	8,597.82	4,648.66	94.72	94.14	-90.36	-2,950.19	2,839.58	1,199.55	1,011.55	188.00	6.381	
8,838.14	4,641.36	8,632.00	4,648.71	95.58	94.92	-90.35	-2,974.39	2,863.72	1,199.29	1,009.70	189.59	6.326	
8,900.00	4,641.84	8,684.23	4,648.60	96.97	96.11	-90.34	-3,011.17	2,900.80	1,200.18	1,008.13	192.05	6.249	
9,000.00	4,642.86	8,769.96	4,647.83	99.21	98.07	-90.27	-3,070.93	2,962.27	1,205.06	1,009.04	196.02	6.148	
9,100.00	4,643.47	8,902.39	4,646.49	101.43	101.10	-90.16	-3,163.16	3,057.27	1,212.68	1,010.94	201.74	6.011	
9,200.00	4,643.91	8,997.58	4,647.74	103.65	103.26	-90.20	-3,231.03	3,124.01	1,218.48	1,012.41	206.07	5.913	
9,300.00	4,642.80	9,084.71	4,648.06	105.87	105.25	-90.17	-3,292.53	3,185.72	1,224.47	1,014.36	210.11	5.828	
9,400.00	4,640.48	9,174.44	4,646.56	108.11	107.30	-90.21	-3,355.24	3,249.88	1,230.26	1,016.03	214.24	5.743	
9,500.00	4,638.46	9,310.01	4,644.76	110.35	110.40	-90.27	-3,450.64	3,346.16	1,234.77	1,014.70	220.07	5.611	
9,600.00	4,636.50	9,405.79	4,646.02	112.59	112.57	-90.41	-3,518.94	3,413.29	1,237.46	1,013.01	224.45	5.513	
9,700.00	4,634.87	9,512.66	4,648.80	114.84	115.00	-90.63	-3,595.67	3,487.63	1,239.04	1,009.83	229.21	5.406	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 050H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 416-MWD, 2565-MWD, 12156-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
9,800.00	4,633.72	9,619.71	4,653.40	117.08	117.42	-90.90	-3,672.34	3,562.19	1,241.05	1,007.10	233.95	5.305	
9,900.00	4,633.01	9,746.54	4,657.29	119.33	120.28	-91.12	-3,765.18	3,648.51	1,241.14	1,001.91	239.23	5.188	
9,968.28	4,632.72	9,810.44	4,659.27	120.86	121.72	-91.23	-3,812.25	3,691.68	1,240.93	998.75	242.18	5.124	
10,000.00	4,632.61	9,838.30	4,659.43	121.57	122.34	-91.24	-3,832.68	3,710.62	1,241.03	997.53	243.50	5.097	
10,100.00	4,632.33	9,905.55	4,658.51	123.82	123.87	-91.20	-3,881.45	3,756.91	1,242.00	995.03	246.97	5.029	
10,200.00	4,630.93	9,973.57	4,657.16	126.08	125.42	-91.19	-3,929.21	3,805.33	1,243.71	993.42	250.29	4.969	
10,300.00	4,629.85	10,108.41	4,653.82	128.34	128.50	-91.10	-4,023.51	3,901.63	1,245.82	989.63	256.19	4.863	
10,395.15	4,628.79	10,212.14	4,654.31	130.49	130.86	-91.17	-4,098.53	3,973.26	1,245.09	984.30	260.79	4.774	
10,400.00	4,628.70	10,216.25	4,654.38	130.60	130.95	-91.18	-4,101.49	3,976.12	1,245.07	984.09	260.99	4.771	
10,500.00	4,627.55	10,359.52	4,653.45	132.86	134.18	-91.21	-4,206.38	4,073.64	1,243.83	977.09	266.74	4.663	
10,600.00	4,626.66	10,450.76	4,650.79	135.12	136.23	-91.13	-4,273.92	4,134.92	1,240.38	969.34	271.04	4.576	
10,700.00	4,626.32	10,545.42	4,649.76	137.39	138.36	-91.10	-4,343.78	4,198.79	1,235.33	959.89	275.44	4.485	
10,800.00	4,625.59	10,636.96	4,650.79	139.67	140.42	-91.19	-4,410.89	4,261.03	1,231.46	951.73	279.73	4.402	
10,900.00	4,624.56	10,739.05	4,648.99	141.94	142.73	-91.16	-4,485.67	4,330.51	1,228.32	943.99	284.33	4.320	
11,000.00	4,623.95	10,830.29	4,646.76	144.21	144.79	-91.07	-4,552.32	4,392.77	1,224.45	935.83	288.62	4.242	
11,100.00	4,623.92	10,911.73	4,646.15	146.49	146.64	-91.04	-4,611.23	4,449.00	1,220.79	928.21	292.58	4.173	
11,200.00	4,623.83	10,992.00	4,645.86	148.77	148.47	-91.04	-4,668.07	4,505.67	1,219.55	923.13	296.41	4.114	
11,246.43	4,623.88	11,021.44	4,645.81	149.83	149.14	-91.03	-4,688.61	4,526.76	1,219.49	921.67	297.82	4.095	
11,300.00	4,624.25	11,067.52	4,646.18	151.05	150.20	-91.03	-4,720.59	4,559.94	1,219.45	919.51	299.94	4.066	
11,400.00	4,624.72	11,186.84	4,646.64	153.34	152.94	-91.03	-4,803.59	4,645.65	1,219.10	913.71	305.39	3.992	
11,500.00	4,624.82	11,296.38	4,643.56	155.62	155.45	-90.88	-4,880.98	4,723.11	1,216.55	906.18	310.37	3.920	
11,600.00	4,624.62	11,385.13	4,642.65	157.91	157.48	-90.85	-4,943.56	4,786.02	1,214.57	900.07	314.50	3.862	
11,662.69	4,623.85	11,440.99	4,643.00	159.34	158.76	-90.90	-4,982.67	4,825.91	1,214.31	897.23	317.08	3.830	
11,700.00	4,623.02	11,474.47	4,643.34	160.19	159.53	-90.95	-5,006.01	4,849.91	1,214.79	896.18	318.61	3.813	
11,800.00	4,620.57	11,567.16	4,645.07	162.48	161.66	-91.16	-5,070.27	4,916.68	1,214.98	892.13	322.85	3.763	
11,900.00	4,617.69	11,668.79	4,646.75	164.78	164.00	-91.40	-5,140.79	4,989.85	1,213.67	886.15	327.52	3.706	
12,000.00	4,614.62	11,747.00	4,647.72	167.08	165.80	-91.60	-5,194.37	5,046.81	1,211.96	880.95	331.01	3.661	
12,100.00	4,610.86	11,863.57	4,647.76	169.38	168.49	-91.86	-5,274.33	5,131.62	1,208.47	872.00	336.48	3.592	
12,200.00	4,606.49	11,946.75	4,647.09	171.21	170.41	-92.02	-5,331.23	5,192.29	1,204.29	864.60	339.68	3.545	
12,201.00	4,606.44	11,947.62	4,647.09	171.23	170.43	-92.03	-5,331.83	5,192.92	1,204.25	864.54	339.71	3.545 SF	



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 051H - Original Hole - Surveys Original Hole													Offset Site Error:	0.00 ft
Survey Program: 415-MWD, 2640-MWD, 12451-MWD													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	0.00	0.00	48.04	53.55	59.56	80.09					
100.00	100.00	99.82	99.82	0.13	0.17	100.00	53.74	59.53	80.22	79.91	0.30	264.884 ES		
200.00	200.00	199.64	199.64	0.31	0.34	99.82	54.32	59.47	80.59	79.94	0.65	123.898		
300.00	300.00	299.45	299.45	0.49	0.51	99.53	55.28	59.36	81.22	80.22	1.00	81.371		
400.00	400.00	399.26	399.25	0.67	0.67	99.13	56.62	59.20	82.10	80.76	1.35	61.001		
500.00	499.99	499.24	499.21	1.00	1.00	85.50	58.28	58.93	83.07	81.07	2.00	41.448		
600.00	599.99	599.23	599.18	1.36	1.36	105.51	60.07	58.54	84.10	81.38	2.72	30.903		
700.00	699.99	699.31	699.25	1.72	1.72	126.23	61.74	58.21	85.44	82.00	3.44	24.851		
800.00	799.98	799.44	799.36	2.07	2.08	140.79	63.30	57.77	86.82	82.67	4.15	20.907		
900.00	899.98	899.58	899.50	2.43	2.44	156.19	64.57	57.45	88.34	83.48	4.87	18.154		
1,000.00	999.85	999.76	999.67	2.79	2.80	157.35	65.54	56.99	93.04	87.46	5.58	16.667		
1,100.00	1,099.31	1,099.35	1,099.26	3.16	3.15	161.48	66.24	56.42	102.74	96.44	6.30	16.307 SF		
1,200.00	1,198.17	1,198.23	1,198.13	3.54	3.51	169.27	66.81	55.97	117.28	110.26	7.02	16.709		
1,300.00	1,296.24	1,296.35	1,296.25	3.95	3.86	177.52	67.28	55.59	136.66	128.93	7.73	17.671		
1,400.00	1,393.27	1,393.70	1,393.60	4.39	4.20	-177.57	67.63	55.19	160.75	152.31	8.44	19.037		
1,500.00	1,489.00	1,489.56	1,489.46	4.88	4.54	-178.77	67.77	54.72	189.32	180.17	9.15	20.693		
1,600.00	1,583.31	1,577.99	1,577.89	5.42	4.85	177.69	68.45	54.87	223.19	213.36	9.83	22.715		
1,700.00	1,676.66	1,658.24	1,658.04	6.01	5.13	176.16	71.56	56.98	263.21	252.77	10.44	25.201		
1,800.00	1,769.99	1,734.28	1,733.70	6.63	5.40	175.78	77.56	61.42	307.84	296.83	11.01	27.960		
1,900.00	1,863.43	1,805.00	1,803.75	7.26	5.66	175.36	85.35	67.25	355.80	344.28	11.52	30.892		
2,000.00	1,956.98	1,883.15	1,880.71	7.90	5.95	174.65	96.06	75.49	406.44	394.35	12.09	33.610		
2,100.00	2,050.92	1,953.70	1,949.73	8.54	6.23	174.17	107.48	84.62	459.05	446.45	12.59	36.452		
2,200.00	2,145.21	2,020.21	2,014.30	9.18	6.49	176.24	119.77	94.76	513.67	500.62	13.05	39.354		
2,300.00	2,239.47	2,087.00	2,078.47	9.82	6.78	176.21	133.76	106.88	571.51	557.99	13.52	42.276		
2,400.00	2,333.71	2,143.57	2,132.26	10.47	7.03	176.13	146.98	118.34	632.05	618.17	13.88	45.527		
2,500.00	2,428.17	2,207.75	2,192.74	11.11	7.34	176.24	163.49	132.09	694.23	679.89	14.34	48.428		
2,600.00	2,523.15	2,276.00	2,256.72	11.74	7.68	176.06	181.80	147.22	756.27	741.44	14.83	50.986		
2,700.00	2,618.35	2,352.66	2,328.38	12.26	8.08	176.50	202.72	164.66	818.36	802.97	15.39	53.177		
2,800.00	2,713.54	2,440.72	2,410.72	12.66	8.55	173.90	227.00	184.31	880.40	864.45	15.95	55.195		
2,900.00	2,807.58	2,530.06	2,494.60	13.00	9.04	168.33	251.79	202.47	943.83	927.41	16.42	57.466		
3,000.00	2,900.51	2,614.47	2,574.15	13.40	9.41	169.73	274.81	218.79	1,008.68	991.91	16.77	60.157		
3,100.00	2,993.55	2,692.82	2,648.14	13.83	9.63	172.19	295.84	233.70	1,073.07	1,056.14	16.92	63.407		
3,200.00	3,087.03	2,771.42	2,722.39	14.27	9.83	171.80	316.72	248.84	1,136.57	1,119.53	17.05	66.672		
3,300.00	3,180.19	2,854.49	2,800.90	14.73	10.06	171.45	339.13	264.14	1,200.43	1,183.20	17.23	69.673		
3,400.00	3,274.17	2,983.96	2,923.92	15.21	10.45	171.44	373.53	285.15	1,261.23	1,243.57	17.66	71.416		
3,500.00	3,367.41	3,131.18	3,065.37	15.71	10.89	168.68	410.74	301.79	1,319.88	1,301.68	18.21	72.497		
3,600.00	3,459.96	3,499.91	3,429.10	16.25	11.67	168.65	463.01	318.56	1,370.65	1,351.21	19.44	70.505		
3,700.00	3,552.80	3,632.91	3,562.09	16.80	11.81	170.29	464.16	317.68	1,407.11	1,387.30	19.81	71.034		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Greater Lybrook Pad (48,49,50,51 & 52) - Greater Lybrook Unit No. 052H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 415-MWD, 2789-MWD, 13558-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	0.00	0.00	0.00	0.00	48.21	66.67	74.59	100.04				
100.00	100.00	100.07	100.07	0.13	0.17	100.22	66.71	74.51	100.02	99.72	0.30	330.089	
200.00	200.00	200.14	200.14	0.31	0.34	100.20	66.83	74.26	99.96	99.31	0.65	153.585	
300.00	300.00	300.21	300.20	0.49	0.51	100.17	67.04	73.84	99.85	98.86	1.00	99.988	
400.00	400.00	400.27	400.27	0.67	0.67	100.12	67.33	73.26	99.71	98.36	1.35	74.050	
500.00	499.99	500.26	500.26	1.00	1.01	86.84	67.84	72.43	99.48	97.47	2.01	49.576	
589.12	589.11	589.36	589.35	1.32	1.32	105.08	68.51	71.53	99.34	96.70	2.65	37.555	
600.00	599.99	600.24	600.22	1.36	1.36	107.12	68.58	71.43	99.33	96.60	2.72	36.475 CC	
700.00	699.99	700.16	700.13	1.72	1.72	127.93	69.45	70.38	99.57	96.13	3.44	28.955	
800.00	799.98	800.12	800.09	2.07	2.08	142.65	70.31	69.47	100.11	95.96	4.15	24.108	
900.00	899.98	900.29	900.25	2.43	2.44	158.10	70.97	68.54	100.77	95.90	4.87	20.706 ES	
1,000.00	999.85	1,000.05	1,000.00	2.79	2.79	159.36	71.24	67.98	104.92	99.35	5.57	18.825	
1,100.00	1,099.31	1,099.25	1,099.19	3.16	3.12	164.52	69.87	69.18	114.70	108.43	6.27	18.299 SF	
1,200.00	1,198.17	1,198.18	1,198.07	3.54	3.45	173.44	67.73	71.06	129.54	122.58	6.96	18.613	
1,300.00	1,296.24	1,296.19	1,296.04	3.95	3.78	-177.46	65.35	72.87	149.05	141.40	7.65	19.477	
1,400.00	1,393.27	1,390.91	1,390.72	4.39	4.10	-172.08	63.56	74.83	173.68	165.34	8.34	20.826	
1,500.00	1,489.00	1,482.79	1,482.56	4.88	4.42	-173.26	63.42	77.61	204.53	195.52	9.02	22.681	
1,600.00	1,583.31	1,571.99	1,571.69	5.42	4.73	-177.23	65.04	80.78	241.36	231.67	9.69	24.914	
1,700.00	1,676.66	1,655.92	1,655.46	6.01	5.02	-179.37	68.86	84.10	282.66	272.34	10.32	27.384	
1,800.00	1,769.99	1,733.76	1,732.93	6.63	5.30	179.67	75.04	88.49	327.13	316.23	10.90	30.002	
1,900.00	1,863.43	1,804.00	1,802.49	7.26	5.55	178.91	82.57	94.54	375.02	363.61	11.41	32.861	
2,000.00	1,956.98	1,875.81	1,873.15	7.90	5.82	177.97	92.09	103.07	426.27	414.34	11.93	35.729	
2,100.00	2,050.92	1,943.98	1,939.69	8.54	6.08	177.30	102.91	113.20	479.92	467.51	12.41	38.671	
2,200.00	2,145.21	2,009.96	2,003.55	9.18	6.35	179.21	115.13	124.35	535.56	522.70	12.86	41.639	
2,300.00	2,239.47	2,071.46	2,062.50	9.82	6.61	178.99	128.26	135.98	594.11	580.83	13.28	44.745	
2,400.00	2,333.71	2,129.91	2,117.89	10.47	6.88	178.67	142.50	147.99	655.43	641.76	13.67	47.954	
2,500.00	2,428.17	2,181.00	2,165.72	11.11	7.12	178.57	156.76	158.90	718.80	704.82	13.98	51.434	
2,600.00	2,523.15	2,251.40	2,230.99	11.74	7.48	178.01	178.10	174.45	782.61	768.11	14.50	53.959	
2,700.00	2,618.35	2,321.08	2,295.18	12.26	7.85	178.15	200.06	190.32	846.97	831.98	14.99	56.498	
2,800.00	2,713.54	2,395.99	2,364.10	12.66	8.27	175.29	223.71	207.73	911.73	896.31	15.43	59.097	
2,900.00	2,807.58	2,474.77	2,436.68	13.00	8.72	169.51	248.13	226.21	978.81	962.99	15.82	61.879	
3,000.00	2,900.51	2,557.46	2,513.12	13.40	9.21	170.88	273.18	245.35	1,047.51	1,031.23	16.28	64.349	
3,100.00	2,993.55	2,636.88	2,586.77	13.83	9.69	173.33	296.87	263.28	1,115.58	1,098.87	16.71	66.773	
3,200.00	3,087.03	2,718.03	2,662.20	14.27	10.05	172.85	320.84	281.24	1,182.39	1,165.38	17.00	69.534	
3,300.00	3,180.19	2,801.05	2,739.54	14.73	10.40	172.46	345.02	299.28	1,249.35	1,232.05	17.30	72.207	
3,400.00	3,274.17	2,898.21	2,830.44	15.21	10.69	172.53	372.93	319.24	1,313.72	1,296.17	17.55	74.868	
3,500.00	3,367.41	2,994.16	2,920.71	15.71	10.99	169.90	399.64	337.79	1,378.35	1,360.53	17.82	77.343	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: Rodeo Unit 511 pad (511, 512 & 513) - Rodeo Unit #513H - Original Hole - Surveys Original Hole													Offset Site Error:	0.00 ft
Survey Program: 412-MWD, 2745-MWD, 15103-MWD													Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
11,000.00	4,623.95	4,551.00	4,206.24	144.21	25.86	-32.53	-6,040.62	4,587.75	1,345.11	1,275.83	69.28	19.414		
11,100.00	4,623.92	4,567.89	4,220.22	146.49	25.91	-33.07	-6,050.08	4,588.17	1,253.97	1,183.33	70.64	17.751		
11,200.00	4,623.83	4,583.00	4,232.69	148.77	25.95	-33.44	-6,058.59	4,588.83	1,163.73	1,091.47	72.26	16.105		
11,300.00	4,624.25	4,603.48	4,249.51	151.05	26.01	-32.52	-6,070.19	4,590.21	1,074.53	1,000.67	73.86	14.549		
11,400.00	4,624.72	4,623.15	4,265.60	153.34	26.05	-32.82	-6,081.35	4,592.16	986.46	910.78	75.68	13.035		
11,500.00	4,624.82	4,646.00	4,284.17	155.62	26.10	-33.18	-6,094.31	4,595.15	899.46	821.84	77.62	11.588		
11,600.00	4,624.62	4,677.00	4,309.23	157.91	26.15	-35.26	-6,111.76	4,600.46	814.03	734.37	79.66	10.219		
11,700.00	4,623.02	4,695.54	4,324.14	160.19	26.17	-36.98	-6,122.07	4,604.36	730.13	647.27	82.86	8.812		
11,800.00	4,620.57	4,722.25	4,345.46	162.48	26.19	-37.65	-6,136.68	4,611.07	648.00	561.66	86.35	7.505		
11,900.00	4,617.69	4,752.63	4,369.45	164.78	26.20	-38.55	-6,152.90	4,620.27	568.07	477.66	90.41	6.283		
12,000.00	4,614.62	4,787.87	4,397.02	167.08	26.19	-40.27	-6,170.93	4,632.76	490.80	395.48	95.32	5.149		
12,100.00	4,610.86	4,825.00	4,425.47	169.38	26.17	-43.02	-6,189.50	4,647.73	416.83	315.28	101.55	4.105		
12,200.00	4,606.49	4,866.00	4,455.62	171.21	26.14	-47.01	-6,210.28	4,666.15	348.03	237.46	110.57	3.148		
12,201.00	4,606.44	4,866.00	4,455.62	171.23	26.14	-47.01	-6,210.28	4,666.15	347.38	236.71	110.67	3.139 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 726H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 432-MWD, 2692-MWD, 5231-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	3.00	3.00	0.00	0.01	-6.34	171.08	-19.00	172.13				
100.00	100.00	102.91	102.91	0.13	0.17	45.65	171.09	-19.14	172.10	171.80	0.31	560.061	
200.00	200.00	202.82	202.82	0.31	0.34	45.57	171.12	-19.55	172.02	171.37	0.65	262.881	
300.00	300.00	302.73	302.73	0.49	0.51	45.44	171.18	-20.22	171.89	170.89	1.00	171.640	
400.00	400.00	402.64	402.63	0.67	0.68	45.26	171.25	-21.16	171.70	170.35	1.35	127.326	
500.00	499.99	502.55	502.53	1.00	0.98	31.83	171.32	-22.43	171.35	169.37	1.98	86.568	
567.12	567.11	569.04	569.02	1.24	1.21	46.12	171.64	-22.33	171.19	168.74	2.45	69.929 CC	
600.00	599.99	601.85	601.83	1.36	1.32	52.76	171.94	-21.69	171.20	168.52	2.68	63.943	
700.00	699.99	702.19	702.13	1.72	1.66	75.00	172.75	-19.25	171.34	167.97	3.37	50.775	
800.00	799.98	802.24	802.14	2.07	2.00	91.23	173.51	-16.72	171.77	167.69	4.08	42.137	
900.00	899.98	902.41	902.30	2.43	2.35	108.05	174.03	-14.71	172.37	167.59	4.78	36.047 ES	
1,000.00	999.85	1,002.04	1,001.91	2.79	2.70	110.69	174.57	-13.10	174.43	168.94	5.49	31.764	
1,100.00	1,099.31	1,100.43	1,100.27	3.16	3.05	116.83	175.27	-10.97	179.26	173.05	6.21	28.874	
1,200.00	1,198.17	1,194.12	1,193.76	3.54	3.39	128.20	176.81	-5.24	189.56	182.64	6.92	27.375 SF	
1,300.00	1,296.24	1,284.35	1,283.34	3.95	3.73	141.71	179.99	5.02	209.22	201.59	7.64	27.401	
1,400.00	1,393.27	1,371.00	1,368.74	4.39	4.06	152.66	184.02	19.05	239.12	230.79	8.32	28.724	
1,500.00	1,489.00	1,452.61	1,448.45	4.88	4.40	157.07	188.42	35.96	278.49	269.52	8.97	31.038	
1,600.00	1,583.31	1,528.47	1,521.73	5.42	4.74	158.10	192.90	55.04	326.01	316.44	9.57	34.062	
1,700.00	1,676.66	1,600.00	1,590.06	6.01	5.08	160.77	197.37	75.71	379.61	369.50	10.12	37.522	
1,800.00	1,769.99	1,664.51	1,650.97	6.63	5.42	163.87	201.94	96.45	437.24	426.64	10.60	41.259	
1,900.00	1,863.43	1,726.92	1,709.18	7.26	5.77	166.41	207.13	118.33	498.32	487.26	11.06	45.072	
2,000.00	1,956.98	1,788.00	1,765.45	7.90	6.14	168.26	212.62	141.45	562.14	550.64	11.50	48.862	
2,100.00	2,050.92	1,858.70	1,830.07	8.54	6.60	170.37	219.05	169.39	626.96	614.89	12.06	51.971	
2,200.00	2,145.21	1,929.38	1,894.53	9.18	7.08	174.72	225.32	197.71	691.95	679.31	12.63	54.779	
2,300.00	2,239.47	2,000.43	1,959.17	9.82	7.58	176.53	231.69	226.52	757.85	744.63	13.22	57.333	
2,400.00	2,333.71	2,074.75	2,026.73	10.47	8.11	178.11	238.18	256.78	824.18	810.33	13.85	59.511	
2,500.00	2,428.17	2,148.80	2,094.07	11.11	8.66	179.70	244.53	286.93	890.23	875.75	14.48	61.471	
2,600.00	2,523.15	2,223.63	2,162.12	11.74	9.22	-179.20	250.94	317.38	955.25	940.12	15.12	63.165	
2,700.00	2,618.35	2,297.14	2,228.95	12.26	9.78	-177.59	257.22	347.34	1,019.94	1,004.22	15.72	64.900	
2,800.00	2,713.54	2,369.15	2,294.30	12.66	10.33	-179.05	263.25	376.98	1,085.00	1,068.82	16.18	67.055	
2,900.00	2,807.58	2,439.70	2,358.27	13.00	10.88	176.46	269.16	406.16	1,153.02	1,136.47	16.54	69.701	
3,000.00	2,900.51	2,515.69	2,427.21	13.40	11.48	178.97	275.53	437.47	1,223.32	1,206.34	16.99	72.010	
3,100.00	2,993.55	2,598.97	2,503.05	13.83	12.13	-177.71	282.43	471.18	1,293.06	1,275.56	17.50	73.888	
3,200.00	3,087.03	2,684.10	2,581.01	14.27	12.69	-177.37	289.54	504.62	1,361.19	1,343.27	17.93	75.931	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 726H - Sidetrack 01 - Surveys Sidetrack 01												Offset Site Error:	0.00 ft
Survey Program: 432-MWD, 2692-MWD, 4630-MWD, 14739-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	3.00	3.00	0.00	0.01	-6.34	171.08	-19.00	172.13				
100.00	100.00	102.91	102.91	0.13	0.17	45.65	171.09	-19.14	172.10	171.80	0.31	560.061	
200.00	200.00	202.82	202.82	0.31	0.34	45.57	171.12	-19.55	172.02	171.37	0.65	262.881	
300.00	300.00	302.73	302.73	0.49	0.51	45.44	171.18	-20.22	171.89	170.89	1.00	171.640	
400.00	400.00	402.64	402.63	0.67	0.68	45.26	171.25	-21.16	171.70	170.35	1.35	127.326	
500.00	499.99	502.55	502.53	1.00	0.98	31.83	171.32	-22.43	171.35	169.37	1.98	86.568	
567.12	567.11	569.04	569.02	1.24	1.21	46.12	171.64	-22.33	171.19	168.74	2.45	69.929 CC	
600.00	599.99	601.85	601.83	1.36	1.32	52.76	171.94	-21.69	171.20	168.52	2.68	63.943	
700.00	699.99	702.19	702.13	1.72	1.66	75.00	172.75	-19.25	171.34	167.97	3.37	50.775	
800.00	799.98	802.24	802.14	2.07	2.00	91.23	173.51	-16.72	171.77	167.69	4.08	42.137	
900.00	899.98	902.41	902.30	2.43	2.35	108.05	174.03	-14.71	172.37	167.59	4.78	36.047 ES	
1,000.00	999.85	1,002.04	1,001.91	2.79	2.70	110.69	174.57	-13.10	174.43	168.94	5.49	31.764	
1,100.00	1,099.31	1,100.43	1,100.27	3.16	3.05	116.83	175.27	-10.97	179.26	173.05	6.21	28.874	
1,200.00	1,198.17	1,194.12	1,193.76	3.54	3.39	128.20	176.81	-5.24	189.56	182.64	6.92	27.375 SF	
1,300.00	1,296.24	1,284.35	1,283.34	3.95	3.73	141.71	179.99	5.02	209.22	201.59	7.64	27.401	
1,400.00	1,393.27	1,371.00	1,368.74	4.39	4.06	152.66	184.02	19.05	239.12	230.79	8.32	28.724	
1,500.00	1,489.00	1,452.61	1,448.45	4.88	4.40	157.07	188.42	35.96	278.49	269.52	8.97	31.037	
1,600.00	1,583.31	1,528.47	1,521.73	5.42	4.74	158.10	192.90	55.04	326.01	316.44	9.57	34.062	
1,700.00	1,676.66	1,600.00	1,590.06	6.01	5.08	160.77	197.37	75.71	379.61	369.50	10.12	37.522	
1,800.00	1,769.99	1,664.51	1,650.97	6.63	5.42	163.87	201.94	96.45	437.24	426.64	10.60	41.259	
1,900.00	1,863.43	1,726.92	1,709.18	7.26	5.77	166.41	207.13	118.33	498.32	487.26	11.06	45.072	
2,000.00	1,956.98	1,788.00	1,765.45	7.90	6.14	168.26	212.62	141.45	562.14	550.64	11.50	48.862	
2,100.00	2,050.92	1,858.70	1,830.07	8.54	6.60	170.37	219.05	169.39	626.96	614.89	12.06	51.971	
2,200.00	2,145.21	1,929.38	1,894.53	9.18	7.08	174.72	225.32	197.71	691.95	679.31	12.63	54.779	
2,300.00	2,239.47	2,000.43	1,959.17	9.82	7.58	176.53	231.69	226.52	757.85	744.63	13.22	57.333	
2,400.00	2,333.71	2,074.75	2,026.73	10.47	8.11	178.11	238.18	256.78	824.18	810.33	13.85	59.511	
2,500.00	2,428.17	2,148.80	2,094.07	11.11	8.66	179.70	244.53	286.93	890.23	875.75	14.48	61.471	
2,600.00	2,523.15	2,223.63	2,162.12	11.74	9.22	-179.20	250.94	317.38	955.25	940.12	15.12	63.165	
2,700.00	2,618.35	2,297.14	2,228.95	12.26	9.78	-177.59	257.22	347.34	1,019.94	1,004.22	15.72	64.899	
2,800.00	2,713.54	2,369.15	2,294.30	12.66	10.33	-179.05	263.25	376.98	1,085.00	1,068.82	16.18	67.055	
2,900.00	2,807.58	2,439.70	2,358.27	13.00	10.88	176.46	269.16	406.16	1,153.02	1,136.47	16.54	69.700	
3,000.00	2,900.51	2,515.69	2,427.21	13.40	11.48	178.97	275.53	437.47	1,223.32	1,206.34	16.99	72.009	
3,100.00	2,993.55	2,598.97	2,503.05	13.83	12.13	-177.71	282.43	471.18	1,293.06	1,275.56	17.50	73.888	
3,200.00	3,087.03	2,684.10	2,581.01	14.27	12.69	-177.37	289.54	504.62	1,361.19	1,343.27	17.93	75.931	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 728H - Original Hole - Surveys Original Hole													Offset Site Error: 0.00 ft
Survey Program: 431-MWD, 2695-MWD, 13517-MWD													Offset Well Error: 0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	2.99	2.99	0.00	0.01	-12.08	157.60	-33.74	161.17				
100.00	100.00	102.60	102.60	0.13	0.17	40.13	157.83	-33.27	161.24	160.93	0.31	520.709	
200.00	200.00	202.19	202.17	0.31	0.34	40.70	158.49	-31.91	161.45	160.79	0.66	245.014	
300.00	300.00	301.73	301.69	0.49	0.51	41.65	159.59	-29.67	161.82	160.81	1.01	160.520	
400.00	400.00	401.21	401.10	0.67	0.69	42.95	161.12	-26.54	162.41	161.06	1.36	119.666	
500.00	499.99	499.90	499.72	1.00	0.99	31.14	163.12	-23.38	163.37	161.38	1.99	82.231	
600.00	599.99	600.05	599.82	1.36	1.34	52.54	165.53	-21.57	164.85	162.14	2.70	61.040	
700.00	699.99	703.82	703.59	1.72	1.69	74.05	166.19	-21.40	165.04	161.63	3.41	48.422	
800.00	799.98	805.05	804.78	2.07	2.03	88.63	165.11	-23.59	164.09	159.99	4.10	40.014	
900.00	899.98	905.30	904.99	2.43	2.37	103.86	163.57	-26.13	163.03	158.23	4.80	33.991	
953.48	953.42	958.82	958.49	2.62	2.55	104.59	162.73	-27.42	162.85	157.68	5.17	31.489	
1,000.00	999.85	1,005.62	1,005.27	2.79	2.72	105.27	161.95	-28.49	162.93	157.42	5.50	29.620 ES	
1,100.00	1,099.31	1,105.51	1,105.12	3.16	3.06	110.43	160.10	-30.61	164.36	158.14	6.22	26.441	
1,200.00	1,198.17	1,204.12	1,203.70	3.54	3.41	120.51	158.40	-32.14	169.12	162.18	6.94	24.360	
1,300.00	1,296.24	1,302.20	1,301.75	3.95	3.75	133.16	156.87	-30.92	179.47	171.79	7.68	23.374 SF	
1,400.00	1,393.27	1,395.49	1,394.84	4.39	4.08	144.25	155.45	-25.12	197.45	189.05	8.40	23.505	
1,500.00	1,489.00	1,482.93	1,481.74	4.88	4.39	149.58	155.02	-15.47	224.56	215.47	9.09	24.703	
1,600.00	1,583.31	1,569.45	1,567.16	5.42	4.71	152.35	155.14	-1.73	259.95	250.18	9.76	26.630	
1,700.00	1,676.66	1,652.86	1,648.87	6.01	5.04	156.79	154.26	14.95	300.90	290.50	10.40	28.933	
1,800.00	1,769.99	1,731.07	1,724.85	6.63	5.36	161.49	152.87	33.40	345.83	334.84	10.99	31.464	
1,900.00	1,863.43	1,803.50	1,794.50	7.26	5.68	165.30	151.58	53.25	394.83	383.30	11.53	34.252	
2,000.00	1,956.98	1,870.22	1,857.77	7.90	6.01	168.14	150.48	74.34	447.92	435.91	12.01	37.288	
2,100.00	2,050.92	1,940.30	1,923.35	8.54	6.38	171.02	149.27	99.02	503.76	491.23	12.54	40.184	
2,200.00	2,145.21	2,013.25	1,991.03	9.18	6.79	176.14	147.75	126.20	561.25	548.14	13.10	42.834	
2,300.00	2,239.47	2,090.79	2,062.80	9.82	7.25	178.79	146.18	155.51	620.19	606.45	13.74	45.130	
2,400.00	2,333.71	2,174.93	2,140.88	10.47	7.77	-178.89	144.31	186.82	679.42	664.95	14.47	46.952	
2,500.00	2,428.17	2,254.44	2,214.77	11.11	8.28	-176.84	142.34	216.11	738.28	723.13	15.16	48.713	
2,600.00	2,523.15	2,336.43	2,290.97	11.74	8.81	-175.30	140.09	246.27	796.08	780.21	15.87	50.154	
2,700.00	2,618.35	2,418.50	2,367.28	12.26	9.35	-173.30	137.57	276.38	853.44	836.90	16.55	51.581	
2,800.00	2,713.54	2,508.93	2,451.53	12.66	9.95	-174.15	134.69	309.11	910.69	893.52	17.18	53.013	
2,900.00	2,807.58	2,604.07	2,540.78	13.00	10.57	-177.77	131.71	341.94	970.02	952.26	17.75	54.638	
3,000.00	2,900.51	2,687.92	2,619.86	13.40	10.94	-175.20	129.37	369.71	1,031.18	1,013.11	18.06	57.085	
3,100.00	2,993.55	2,769.34	2,696.85	13.83	11.19	-172.14	127.39	396.11	1,091.82	1,073.58	18.24	59.866	
3,200.00	3,087.03	2,839.62	2,763.32	14.27	11.41	-171.90	125.92	418.90	1,151.66	1,133.30	18.36	62.717	
3,300.00	3,180.19	2,915.69	2,835.08	14.73	11.67	-171.65	124.79	444.13	1,213.12	1,194.57	18.55	65.390	
3,400.00	3,274.17	2,999.00	2,913.96	15.21	11.96	-170.98	123.64	470.91	1,271.98	1,253.18	18.80	67.664	
3,500.00	3,367.41	3,055.89	2,967.71	15.71	12.18	-172.72	123.09	489.50	1,333.38	1,314.44	18.94	70.399	
3,600.00	3,459.96	3,112.24	3,020.51	16.25	12.40	-172.40	123.00	509.20	1,398.07	1,378.97	19.10	73.184	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 729H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 431-MWD, 2701-MWD, 12316-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Distance		Rule Assigned:		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	3.04	3.04	0.00	0.01	-33.76	117.52	-78.56	141.36				
100.00	100.00	104.44	104.44	0.13	0.18	18.21	117.00	-78.38	140.76	140.45	0.31	451.873	
200.00	200.00	205.81	205.80	0.31	0.35	18.08	115.50	-77.86	139.03	138.37	0.66	209.853	
300.00	300.00	307.14	307.09	0.49	0.53	17.84	113.01	-76.99	136.16	135.15	1.01	134.242	
400.00	400.00	408.38	408.26	0.67	0.70	17.50	109.55	-75.79	132.16	130.80	1.37	96.623	
500.00	499.99	508.65	508.44	1.00	1.03	3.84	105.35	-74.41	127.22	125.21	2.01	63.155	
600.00	599.99	608.25	607.94	1.36	1.39	23.86	101.26	-72.97	122.14	119.41	2.73	44.745	
700.00	699.99	707.64	707.25	1.72	1.75	44.51	97.28	-71.96	117.52	114.08	3.44	34.127	
800.00	799.98	806.95	806.49	2.07	2.12	59.24	93.74	-71.11	113.60	109.44	4.16	27.331	
900.00	899.98	906.29	905.78	2.43	2.48	74.82	90.65	-70.64	110.47	105.60	4.87	22.693	
1,000.00	999.85	1,005.45	1,004.91	2.79	2.83	77.33	88.07	-70.37	107.08	101.50	5.58	19.184	
1,100.00	1,099.31	1,106.61	1,106.02	3.16	3.20	84.85	85.28	-70.31	103.01	96.70	6.31	16.324	
1,200.00	1,198.17	1,210.16	1,209.38	3.54	3.58	99.24	79.27	-68.85	97.56	90.51	7.06	13.825	
1,300.00	1,296.24	1,312.27	1,310.91	3.95	3.98	118.19	68.99	-65.52	93.14	85.33	7.80	11.933	
1,335.70	1,331.01	1,348.15	1,346.48	4.11	4.12	124.93	64.48	-64.09	92.71	84.63	8.08	11.479 CC, ES	
1,400.00	1,393.27	1,412.38	1,410.01	4.39	4.38	136.89	55.51	-61.21	94.32	85.76	8.56	11.019 SF	
1,500.00	1,489.00	1,511.97	1,508.11	4.88	4.80	150.62	39.12	-56.10	102.80	93.48	9.32	11.029	
1,600.00	1,583.31	1,610.89	1,604.78	5.42	5.25	161.55	19.08	-50.06	117.90	107.79	10.11	11.667	
1,700.00	1,676.66	1,708.79	1,699.40	6.01	5.72	172.81	-5.12	-43.41	138.21	127.26	10.95	12.620	
1,800.00	1,769.99	1,803.73	1,790.35	6.63	6.21	-177.41	-31.44	-36.59	162.08	150.21	11.86	13.662	
1,900.00	1,863.43	1,897.62	1,880.08	7.26	6.71	-170.03	-58.25	-29.89	189.00	176.18	12.82	14.747	
2,000.00	1,956.98	1,991.14	1,969.53	7.90	7.21	-164.84	-84.77	-23.44	218.09	204.29	13.79	15.811	
2,100.00	2,050.92	2,084.32	2,058.77	8.54	7.72	-160.86	-110.82	-17.07	248.02	233.24	14.78	16.778	
2,200.00	2,145.21	2,177.58	2,148.34	9.18	8.23	-155.59	-136.01	-10.65	278.27	262.49	15.78	17.640	
2,300.00	2,239.47	2,272.55	2,239.73	9.82	8.75	-152.94	-161.04	-4.27	309.05	292.26	16.79	18.407	
2,400.00	2,333.71	2,366.78	2,330.10	10.47	9.28	-150.69	-186.90	2.22	340.31	322.49	17.82	19.099	
2,500.00	2,428.17	2,462.74	2,422.02	11.11	9.82	-148.56	-213.73	8.58	371.09	352.21	18.88	19.657	
2,600.00	2,523.15	2,555.78	2,511.42	11.74	10.34	-147.09	-238.72	14.81	401.01	381.12	19.89	20.158	
2,700.00	2,618.35	2,653.62	2,605.76	12.26	10.77	-145.22	-263.90	20.98	430.38	409.62	20.76	20.736	
2,800.00	2,713.54	2,747.35	2,696.46	12.66	11.06	-146.07	-286.91	26.52	459.51	438.22	21.29	21.583	
2,900.00	2,807.58	2,834.55	2,780.59	13.00	11.27	-149.18	-309.00	32.59	493.84	472.20	21.64	22.825	
3,000.00	2,900.51	2,917.97	2,860.48	13.40	11.51	-146.79	-331.91	39.76	532.50	510.48	22.02	24.179	
3,100.00	2,993.55	3,005.00	2,943.25	13.83	11.78	-144.04	-357.20	48.85	572.09	549.60	22.49	25.435	
3,200.00	3,087.03	3,090.78	3,024.70	14.27	12.09	-143.53	-382.29	58.61	611.38	588.38	22.99	26.589	
3,300.00	3,180.19	3,191.69	3,120.94	14.73	12.45	-143.15	-410.65	69.39	651.22	627.55	23.67	27.517	
3,400.00	3,274.17	3,285.71	3,210.53	15.21	12.80	-142.36	-437.64	78.56	688.11	663.80	24.31	28.306	
3,500.00	3,367.41	3,388.56	3,308.98	15.71	13.20	-143.40	-465.88	87.77	726.49	701.43	25.06	28.994	
3,600.00	3,459.96	3,477.00	3,393.79	16.25	13.54	-143.04	-489.79	95.31	766.19	740.49	25.70	29.816	
3,700.00	3,552.80	3,569.97	3,475.88	16.80	14.45	-144.78	-517.57	103.26	801.37	775.00	26.37	29.629	
3,800.00	3,646.16	3,663.17	3,569.27	17.35	15.45	-146.19	-547.16	111.20	836.06	809.29	27.08	30.104	
3,900.00	3,739.94	3,756.26	3,674.45	17.88	16.45	-147.90	-577.33	119.93	871.10	843.82	27.82	30.810	
4,000.00	3,835.14	3,851.45	3,760.04	18.38	17.45	-149.95	-607.86	128.86	906.55	878.65	28.62	31.462	
4,100.00	3,930.20	3,946.43	3,853.45	18.89	18.43	-152.11	-638.85	137.85	942.04	913.79	29.42	32.064	
4,168.63	3,994.25	4,010.45	3,917.12	19.29	19.41	-154.62	-669.37	146.86	977.66	948.29	30.22	32.626	
4,200.00	4,022.81	4,038.66	3,944.09	19.48	19.60	-156.16	-699.65	155.89	1012.03	982.35	31.02	33.138	
4,300.00	4,111.34	4,127.87	4,026.61	20.09	20.21	-158.96	-729.92	164.92	1047.22	1017.64	31.82	33.610	
4,400.00	4,198.24	4,214.70	4,119.66	20.62	20.74	-161.33	-759.97	173.97	1082.31	1052.69	32.62	34.082	
4,500.00	4,283.14	4,299.60	4,204.75	21.06	21.18	-163.03	-789.92	182.92	1117.30	1087.64	33.42	34.554	
4,600.00	4,364.26	4,380.74	4,280.76	21.45	21.57	-164.58	-819.92	191.92	1152.29	1122.64	34.22	35.026	
4,700.00	4,437.42	4,453.89	4,353.09	21.88	22.00	-166.20	-849.92	200.92	1187.28	1157.64	35.02	35.498	
4,800.00	4,499.34	4,515.70	4,419.01	22.38	22.50	-167.93	-879.92	209.92	1222.27	1192.64	35.82	35.970	
4,900.00	4,549.41	4,565.80	4,469.21	22.91	23.03	-169.65	-909.92	218.92	1257.26	1227.64	36.62	36.442	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 729H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 431-MWD, 2701-MWD, 12316-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Offset Wellbore Centre		Distance		Rule Assigned:		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	4,592.10	4,454.00	4,196.18	23.42	13.63	-73.28	-338.63	-249.23	969.43	946.70	22.73	42.650	
5,100.00	4,620.02	4,422.00	4,181.40	23.90	13.63	-66.58	-357.15	-227.74	1,015.16	992.56	22.60	44.920	
5,200.00	4,632.31	4,359.00	4,150.63	24.41	13.70	-62.07	-392.70	-185.81	1,053.36	1,030.90	22.46	46.896	
5,300.00	4,637.77	4,316.66	4,129.30	25.07	13.77	-60.17	-416.16	-157.75	1,092.02	1,069.25	22.78	47.944	
5,400.00	4,639.18	4,296.00	4,118.02	25.92	13.81	-59.12	-427.01	-144.27	1,133.77	1,110.44	23.33	48.604	
5,500.00	4,639.23	4,265.00	4,099.81	26.98	13.87	-57.75	-442.42	-124.47	1,180.28	1,156.45	23.84	49.512	
5,600.00	4,638.86	4,233.00	4,079.42	28.24	13.94	-57.65	-457.22	-104.76	1,231.51	1,207.17	24.33	50.607	
5,700.00	4,639.03	4,202.00	4,058.18	29.67	14.00	-54.70	-470.44	-86.46	1,288.41	1,263.58	24.82	51.904	
5,800.00	4,638.74	4,184.94	4,045.91	31.24	14.03	-57.05	-477.26	-76.75	1,349.37	1,323.98	25.40	53.132	
5,900.00	4,641.22	4,170.00	4,034.87	32.91	14.06	-56.97	-482.98	-68.48	1,412.44	1,386.51	25.93	54.461	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 760H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 431-MWD, 2696-MWD, 13379-MWD												Offset Well Error:	0.00 ft
Reference	Offset	Semi Major Axis		Rule Assigned:		Distance		Warning					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
0.00	0.00	2.98	2.98	0.00	0.01	-25.87	131.00	-63.52	145.59				
100.00	100.00	102.22	102.22	0.13	0.17	26.23	131.32	-63.50	145.80	145.49	0.31	475.847	
200.00	200.00	201.46	201.45	0.31	0.34	26.44	132.22	-63.43	146.39	145.74	0.65	224.390	
300.00	300.00	300.68	300.67	0.49	0.51	26.80	133.72	-63.33	147.37	146.37	1.00	147.603	
400.00	400.00	399.89	399.85	0.67	0.67	27.28	135.81	-63.18	148.75	147.40	1.34	110.610	
500.00	499.99	499.18	499.10	1.00	0.97	14.74	138.53	-62.90	150.44	148.47	1.97	76.300	
600.00	599.99	599.61	599.50	1.36	1.33	35.87	141.35	-62.64	152.08	149.39	2.69	56.527	
700.00	699.99	701.45	701.31	1.72	1.70	57.66	143.57	-62.37	153.34	149.93	3.41	44.955	
800.00	799.98	804.56	804.41	2.07	2.05	73.51	143.87	-61.15	152.79	148.67	4.12	37.046	
900.00	899.98	904.38	904.22	2.43	2.39	90.10	143.26	-59.80	151.62	146.80	4.82	31.455	
1,000.00	999.85	1,003.83	1,003.66	2.79	2.74	92.73	142.88	-59.27	151.22	145.70	5.52	27.393	
1,016.09	1,015.89	1,019.91	1,019.74	2.85	2.79	93.88	142.83	-59.16	151.21	145.57	5.64	26.833	
1,100.00	1,099.31	1,103.01	1,102.84	3.16	3.08	99.35	142.58	-58.55	151.71	145.48	6.23	24.334 ES	
1,200.00	1,198.17	1,201.87	1,201.70	3.54	3.43	110.85	142.37	-58.19	155.29	148.33	6.96	22.302	
1,300.00	1,296.24	1,299.94	1,299.77	3.95	3.77	124.13	142.04	-58.07	164.10	156.40	7.70	21.305	
1,400.00	1,393.27	1,399.30	1,399.11	4.39	4.11	135.43	141.14	-56.79	179.08	170.62	8.46	21.179 SF	
1,500.00	1,489.00	1,498.66	1,498.22	4.88	4.46	142.06	137.95	-50.94	198.91	189.70	9.21	21.604	
1,600.00	1,583.31	1,595.76	1,594.45	5.42	4.82	147.02	131.45	-39.77	223.07	213.13	9.94	22.439	
1,700.00	1,676.66	1,687.75	1,684.91	6.01	5.17	153.51	122.52	-25.72	251.81	241.16	10.65	23.646	
1,800.00	1,769.99	1,775.31	1,770.53	6.63	5.52	159.95	112.70	-10.25	284.51	273.18	11.33	25.112	
1,900.00	1,863.43	1,863.24	1,856.03	7.26	5.89	165.56	101.83	7.21	320.69	308.68	12.02	26.690	
2,000.00	1,956.98	1,953.30	1,943.03	7.90	6.30	170.30	89.03	26.59	359.14	346.40	12.73	28.204	
2,100.00	2,050.92	2,041.77	2,028.20	8.54	6.71	174.37	75.16	46.09	398.30	384.85	13.46	29.594	
2,200.00	2,145.21	2,131.39	2,114.66	9.18	7.14	-179.98	61.47	65.34	438.22	424.01	14.21	30.832	
2,300.00	2,239.47	2,217.08	2,197.48	9.82	7.56	-177.11	48.82	83.31	479.33	464.37	14.95	32.052	
2,400.00	2,333.71	2,302.56	2,279.71	10.47	8.00	-174.58	35.64	102.61	522.29	506.58	15.71	33.245	
2,500.00	2,428.17	2,393.58	2,367.14	11.11	8.47	-172.04	21.10	123.28	565.30	548.76	16.53	34.193	
2,600.00	2,523.15	2,488.07	2,458.19	11.74	8.96	-170.11	6.31	143.78	606.78	589.39	17.39	34.887	
2,700.00	2,618.35	2,583.70	2,550.80	12.26	9.45	-167.93	-7.74	163.03	647.24	629.06	18.19	35.584	
2,800.00	2,713.54	2,677.72	2,642.21	12.66	9.78	-168.65	-20.68	180.84	687.40	668.73	18.66	36.830	
2,900.00	2,807.58	2,763.98	2,726.07	13.00	9.96	-171.98	-32.64	197.06	731.26	712.40	18.86	38.782	
3,000.00	2,900.51	2,843.35	2,802.76	13.40	10.12	-169.33	-45.17	213.24	778.84	759.80	19.04	40.913	
3,100.00	2,993.55	2,927.67	2,883.69	13.83	10.33	-166.06	-59.82	231.84	827.07	807.78	19.29	42.884	
3,200.00	3,087.03	3,017.84	2,970.53	14.27	10.56	-165.34	-74.70	250.99	873.98	854.37	19.61	44.574	
3,300.00	3,180.19	3,096.15	3,045.63	14.73	10.79	-164.75	-88.54	268.36	922.42	902.52	19.90	46.356	
3,400.00	3,274.17	3,187.43	3,132.93	15.21	11.09	-163.62	-105.30	289.03	969.10	948.78	20.31	47.705	
3,500.00	3,367.41	3,272.59	3,214.46	15.71	11.38	-164.63	-120.85	308.15	1,017.88	997.14	20.73	49.094	
3,600.00	3,459.96	3,374.54	3,312.76	16.25	11.72	-163.83	-137.81	329.08	1,067.26	1,045.98	21.28	50.153	
3,700.00	3,552.80	3,451.23	3,387.07	16.80	11.98	-162.26	-149.39	344.08	1,115.75	1,094.08	21.67	51.487	
3,800.00	3,646.16	3,518.47	3,451.74	17.35	12.23	-161.73	-160.21	358.94	1,164.75	1,142.73	22.03	52.878	
3,900.00	3,739.94	3,587.56	3,517.86	17.88	12.51	-159.33	-171.69	375.41	1,214.08	1,191.66	22.42	54.159	
4,000.00	3,835.14	3,659.00	3,585.77	18.38	12.83	-159.27	-184.28	393.63	1,260.86	1,238.03	22.84	55.207	
4,100.00	3,930.20	3,927.14	3,847.99	18.89	13.71	-157.61	-212.08	438.57	1,301.99	1,277.59	24.40	53.352	
4,200.00	4,022.81	4,080.31	4,000.95	19.48	13.98	-134.33	-214.87	445.33	1,336.56	1,311.50	25.06	53.334	
4,300.00	4,111.34	5,118.30	4,669.96	20.09	15.97	-151.08	206.56	13.28	1,339.96	1,313.58	26.38	50.790	
4,400.00	4,198.24	5,099.52	4,669.10	20.62	15.75	-137.33	193.67	26.90	1,341.66	1,314.81	26.85	49.976	
4,500.00	4,283.14	5,073.10	4,667.74	21.06	15.46	-125.55	175.72	46.24	1,345.47	1,318.37	27.10	49.651	
4,600.00	4,364.26	5,020.53	4,664.95	21.45	14.97	-119.20	140.07	84.78	1,352.48	1,325.44	27.04	50.023	
4,700.00	4,437.42	4,958.10	4,661.25	21.88	14.44	-114.55	97.54	130.32	1,367.76	1,340.86	26.90	50.855	
4,800.00	4,499.34	4,830.18	4,629.19	22.38	13.81	-106.43	13.17	220.08	1,389.96	1,363.24	26.71	52.033	
4,900.00	4,549.41	4,764.74	4,598.67	22.91	13.68	-100.30	-26.67	262.01	1,414.84	1,387.78	27.05	52.297	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 761H - Original Hole - Surveys Original Hole												Offset Site Error:	0.00 ft
Survey Program: 431-MWD, 2703-MWD, 12833-MWD												Offset Well Error:	0.00 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	2.99	2.99	0.00	0.01	-41.78	104.41	-93.30	140.02				
100.00	100.00	102.77	102.77	0.13	0.17	10.40	104.73	-93.06	140.03	139.72	0.31	454.118	
200.00	200.00	202.54	202.53	0.31	0.34	10.89	105.67	-92.37	140.06	139.40	0.66	213.368	
300.00	300.00	302.28	302.25	0.49	0.51	11.68	107.22	-91.23	140.12	139.11	1.00	139.505	
400.00	400.00	401.99	401.92	0.67	0.68	12.80	109.39	-89.63	140.25	138.89	1.35	103.709	
500.00	499.99	501.96	501.84	1.00	0.99	0.99	112.06	-87.62	140.36	138.37	1.99	70.628	
600.00	599.99	602.59	602.44	1.36	1.35	22.37	113.79	-86.32	140.05	137.34	2.71	51.736	
700.00	699.99	703.00	702.85	1.72	1.70	44.00	114.45	-85.91	139.54	136.12	3.42	40.778	
800.00	799.98	803.04	802.89	2.07	2.05	59.51	114.61	-85.57	138.92	134.79	4.13	33.660	
900.00	899.98	902.98	902.83	2.43	2.39	75.33	114.28	-86.52	138.88	134.06	4.82	28.826	
1,000.00	999.85	1,005.38	1,005.19	2.79	2.73	77.01	112.36	-88.16	137.18	131.66	5.52	24.868	
1,100.00	1,099.31	1,110.97	1,110.49	3.16	3.09	81.58	105.57	-91.28	131.50	125.27	6.24	21.088	
1,200.00	1,198.17	1,212.94	1,211.64	3.54	3.45	90.18	93.48	-95.81	122.61	115.64	6.96	17.605	
1,300.00	1,296.24	1,315.43	1,312.95	3.95	3.82	101.83	78.79	-100.72	114.31	106.59	7.72	14.813	
1,400.00	1,393.27	1,418.96	1,414.71	4.39	4.22	113.43	60.27	-105.01	106.91	98.43	8.48	12.611	
1,500.00	1,489.00	1,521.80	1,514.91	4.88	4.66	121.89	37.55	-109.32	100.26	91.03	9.23	10.868	
1,600.00	1,583.31	1,625.11	1,614.18	5.42	5.14	130.98	9.47	-114.49	93.11	83.23	9.88	9.425	
1,700.00	1,676.66	1,725.71	1,709.09	6.01	5.66	144.54	-23.27	-120.61	85.99	75.49	10.49	8.193	
1,772.85	1,744.65	1,796.00	1,775.17	6.46	6.04	156.03	-46.83	-124.95	84.09	73.06	11.03	7.621 CC, ES	
1,800.00	1,769.99	1,822.55	1,800.13	6.63	6.19	160.45	-55.74	-126.60	84.33	73.09	11.25	7.498	
1,900.00	1,863.43	1,919.86	1,891.39	7.26	6.75	176.02	-88.89	-132.98	88.90	76.69	12.21	7.283 SF	
2,000.00	1,956.98	2,016.34	1,981.92	7.90	7.31	-171.00	-121.68	-139.24	99.54	86.13	13.40	7.426	
2,100.00	2,050.92	2,113.15	2,072.96	8.54	7.89	-160.83	-153.94	-145.67	113.97	99.26	14.71	7.749	
2,200.00	2,145.21	2,210.53	2,164.50	9.18	8.49	-150.79	-186.54	-152.13	130.29	114.24	16.05	8.117	
2,300.00	2,239.47	2,307.73	2,255.43	9.82	9.10	-144.04	-220.26	-158.65	148.28	130.86	17.42	8.513	
2,400.00	2,333.71	2,404.74	2,346.08	10.47	9.72	-138.78	-254.21	-165.04	167.97	149.19	18.77	8.947	
2,500.00	2,428.17	2,501.30	2,436.67	11.11	10.33	-134.73	-287.05	-171.37	188.17	168.09	20.08	9.371	
2,600.00	2,523.15	2,598.05	2,527.94	11.74	10.93	-131.79	-318.61	-177.08	208.34	187.00	21.35	9.761	
2,700.00	2,618.35	2,693.95	2,618.33	12.26	11.44	-128.58	-350.18	-182.52	228.87	206.47	22.40	10.216	
2,800.00	2,713.54	2,791.90	2,709.86	12.66	11.79	-127.51	-384.57	-188.22	249.99	226.82	23.18	10.786	
2,900.00	2,807.58	2,884.15	2,794.98	13.00	12.15	-128.67	-419.68	-193.90	276.15	252.32	23.84	11.585	
3,000.00	2,900.51	2,979.51	2,882.66	13.40	12.56	-125.25	-456.78	-199.30	305.76	281.16	24.61	12.426	
3,100.00	2,993.55	3,071.11	2,966.64	13.83	12.98	-121.94	-493.00	-204.44	334.81	309.46	25.36	13.204	
3,200.00	3,087.03	3,162.65	3,050.42	14.27	13.43	-120.76	-529.66	-208.39	364.25	338.11	26.14	13.934	
3,300.00	3,180.19	3,256.18	3,136.16	14.73	13.90	-119.96	-566.88	-211.68	395.54	368.55	26.99	14.657	
3,400.00	3,274.17	3,351.45	3,223.82	15.21	14.39	-118.81	-604.09	-214.62	425.30	397.43	27.87	15.259	
3,500.00	3,367.41	3,449.37	3,314.33	15.71	14.90	-119.55	-641.34	-217.48	456.77	427.94	28.82	15.847	
3,600.00	3,459.96	3,545.76	3,404.15	16.25	15.40	-119.34	-676.18	-220.22	488.93	459.17	29.77	16.426	
3,700.00	3,552.80	3,646.35	3,498.19	16.80	15.92	-118.38	-711.77	-223.25	519.93	489.15	30.78	16.892	
3,800.00	3,646.16	3,741.75	3,587.03	17.35	16.44	-117.94	-746.28	-227.35	548.99	517.25	31.75	17.293	
3,900.00	3,739.94	3,840.38	3,679.46	17.88	16.97	-116.24	-780.52	-230.85	577.31	544.57	32.74	17.634	
4,000.00	3,835.14	3,939.01	3,772.53	18.38	17.48	-116.29	-813.02	-234.11	602.40	568.70	33.70	17.876	
4,100.00	3,930.20	4,038.31	3,866.23	18.89	18.01	-114.74	-845.68	-237.71	627.62	592.93	34.68	18.096	
4,200.00	4,022.81	4,131.57	3,949.00	19.48	19.52	-121.96	-878.68	-241.98	651.42	618.84	35.68	18.335	
4,300.00	4,111.34	4,221.61	4,021.61	20.09	19.35	-124.07	-906.14	-246.68	672.47	640.79	36.72	18.583	
4,400.00	4,198.24	4,308.86	4,102.81	20.62	19.35	-124.10	-933.55	-251.79	694.42	663.62	37.80	18.836	
4,500.00	4,283.14	4,371.07	4,189.93	21.06	19.38	-124.51	-960.49	-257.34	716.64	686.59	38.90	19.093	
4,600.00	4,364.26	4,452.26	4,266.53	21.45	19.41	-124.33	-987.77	-262.45	739.51	709.68	40.00	19.353	
4,700.00	4,437.42	4,523.35	4,336.96	21.88	19.44	-124.72	-1014.31	-267.75	762.42	732.64	41.10	19.613	
4,759.95	4,476.00	4,561.30	4,376.80	22.18	19.46	-119.43	-1039.31	-272.04	785.37	755.69	42.20	19.873	
4,800.00	4,499.34	4,601.04	4,406.04	22.38	19.48	-115.09	-1064.31	-276.49	808.31	778.69	43.30	20.133	
4,900.00	4,549.41	4,651.94	4,456.16	22.91	19.53	-102.92	-1089.50	-281.85	831.26	801.64	44.40	20.393	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Offset Design: W Lybrook 726 Pad (726, 728, 729, 760 & 761) - W Lybrook Unit No. 761H - Original Hole - Surveys Original Hole													Offset Site Error:	0.00 ft
Survey Program: 431-MWD, 2703-MWD, 12833-MWD													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		Rule Assigned:		Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,000.00	4,592.10	4,817.44	4,525.90	23.42	19.58	-87.56	-820.63	-541.44	327.85	303.24	24.61	13.322		
5,100.00	4,620.02	4,772.00	4,500.46	23.90	19.63	-74.52	-841.19	-509.92	378.51	354.66	23.85	15.870		
5,200.00	4,632.31	4,740.00	4,481.17	24.41	19.65	-67.23	-853.75	-487.70	431.94	407.41	24.53	17.610		
5,300.00	4,637.77	4,697.45	4,453.47	25.07	19.66	-62.23	-868.26	-458.87	492.68	467.48	25.20	19.550		
5,400.00	4,639.18	4,657.05	4,425.00	25.92	19.67	-58.29	-880.63	-433.01	558.20	532.19	26.01	21.464		
5,500.00	4,639.23	4,623.89	4,400.13	26.98	19.67	-54.92	-889.70	-413.06	629.07	602.10	26.97	23.325		
5,600.00	4,638.86	4,593.99	4,376.61	28.24	19.67	-54.34	-896.97	-396.09	704.43	676.54	27.89	25.255		
5,700.00	4,639.03	4,568.14	4,355.57	29.67	19.66	-48.55	-902.63	-382.17	784.22	755.49	28.73	27.294		
5,800.00	4,638.74	4,551.00	4,341.30	31.24	19.66	-53.14	-906.01	-373.31	867.02	837.44	29.58	29.309		
5,900.00	4,641.22	4,519.00	4,314.09	32.91	19.64	-51.91	-911.49	-357.40	951.36	921.36	30.00	31.713		
6,000.00	4,642.45	4,507.53	4,304.17	34.67	19.64	-48.07	-913.19	-351.89	1,037.51	1,006.77	30.74	33.750		
6,100.00	4,642.17	4,488.00	4,287.11	36.51	19.62	-46.87	-915.77	-342.73	1,125.34	1,094.12	31.21	36.055		
6,200.00	4,643.36	4,476.06	4,276.58	38.40	19.61	-50.83	-917.16	-337.30	1,214.09	1,182.35	31.74	38.252		
6,300.00	4,644.93	4,456.00	4,258.66	40.35	19.59	-48.22	-919.12	-328.49	1,303.76	1,271.68	32.08	40.637		
6,400.00	4,644.27	4,456.00	4,258.66	42.33	19.59	-47.39	-919.12	-328.49	1,394.10	1,361.45	32.65	42.704		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report



Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6747+25 @ 6772.00ft (Aztec 10

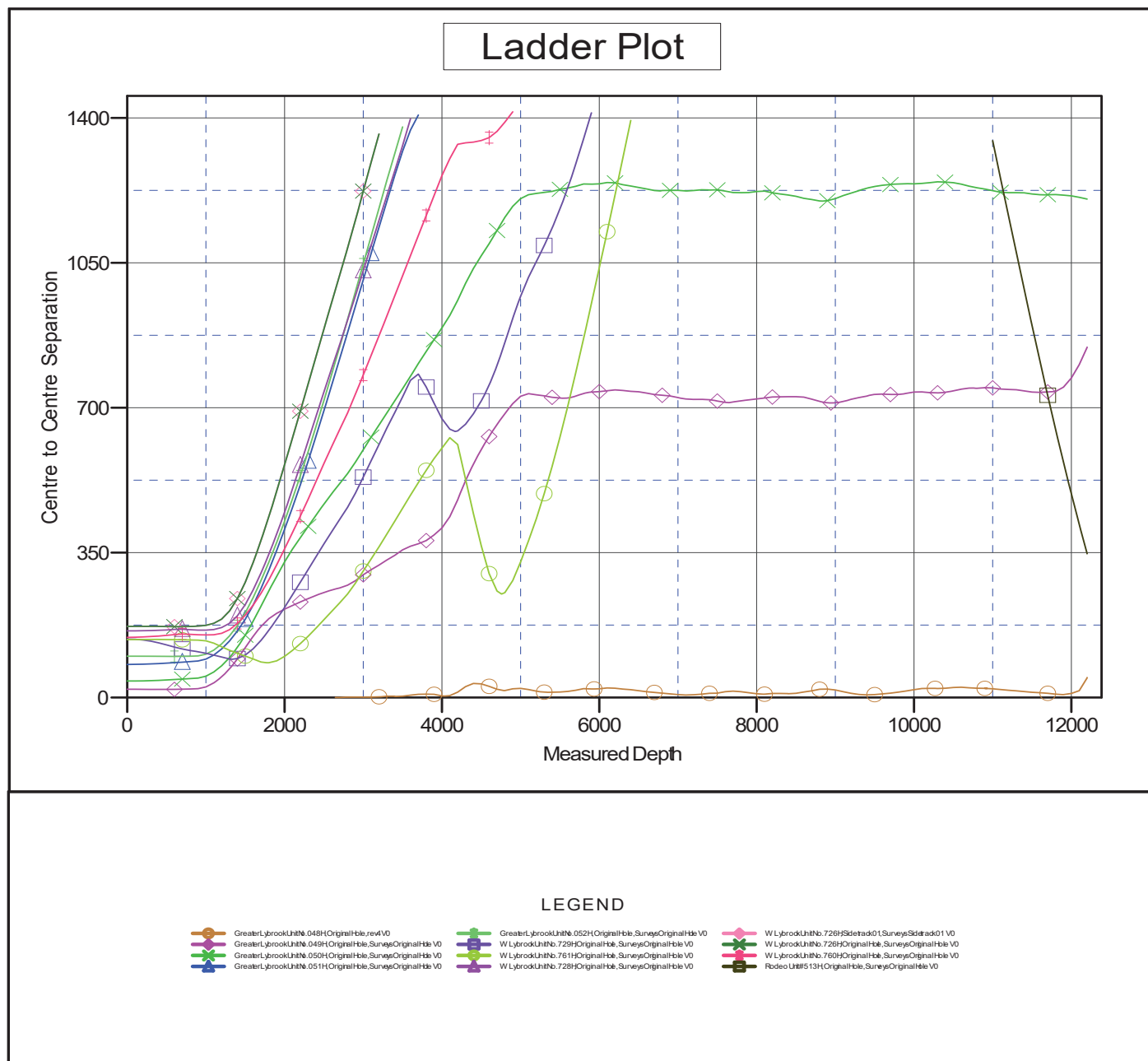
Offset Depths are relative to Offset Datum

Central Meridian is -107.833333333

Coordinates are relative to: Greater Lybrook Unit No. 048H

Coordinate System is US State Plane 1983, New Mexico Western Zone

Grid Convergence at Surface is: 0.04°



CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation



Anticollision Report

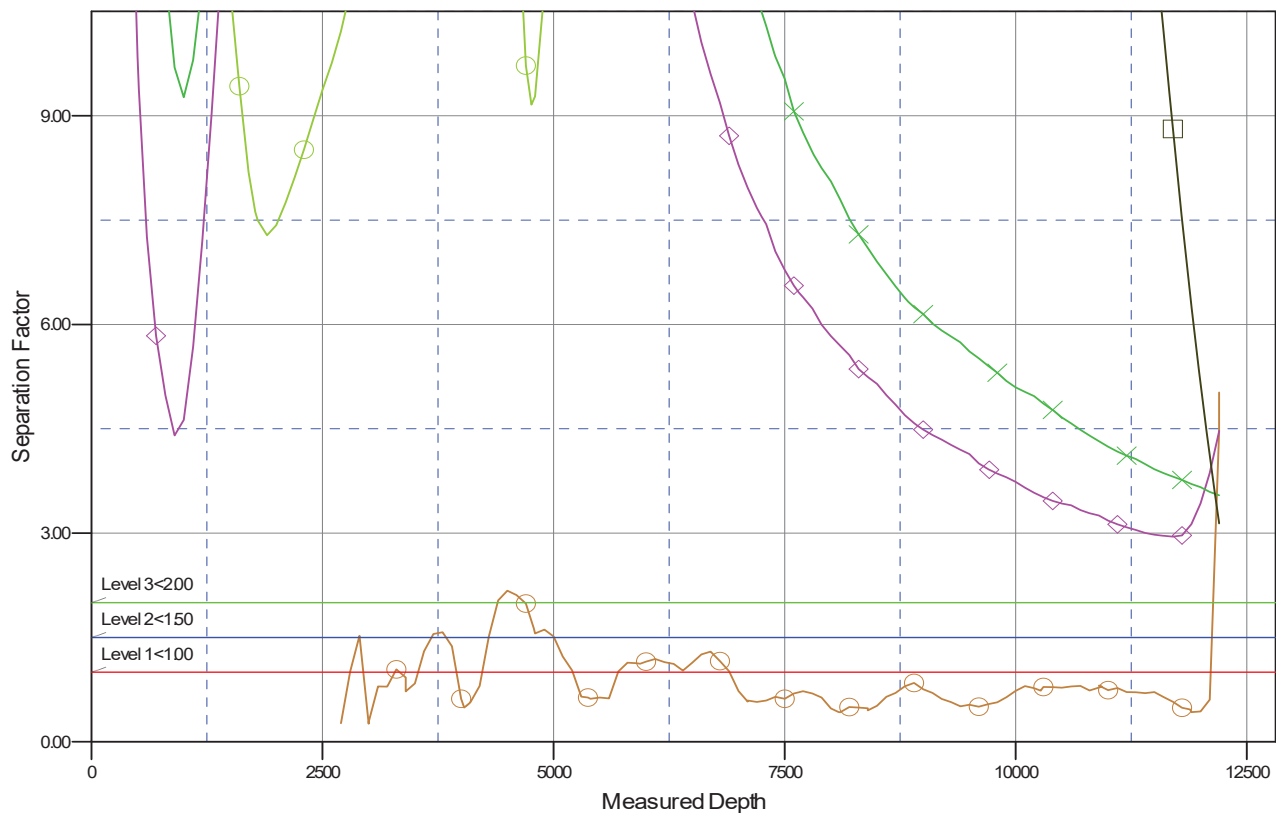


Company:	Enduring Resources LLC	Local Co-ordinate Reference:	Well Greater Lybrook Unit No. 048H
Project:	San Juan County, New Mexico NAD83 NM W	TVD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Reference Site:	Greater Lybrook Pad (48,49,50,51 & 52)	MD Reference:	RKB=6747+25 @ 6772.00ft (Aztec 1000)
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	Greater Lybrook Unit No. 048H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 ft	Output errors are at	2.00 sigma
Reference Wellbore	Original Hole	Database:	DB_Decv0422v16
Reference Design:	MWD surveys Original Hole	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB=6747+25 @ 6772.00ft (Aztec 10
Offset Depths are relative to Offset Datum
Central Meridian is -107.833333333

Coordinates are relative to: Greater Lybrook Unit No. 048H
Coordinate System is US State Plane 1983, New Mexico Western Zone
Grid Convergence at Surface is: 0.04°

Separation Factor Plot



LEGEND

GreaterLybrookUnitNo.048HOriginalHole.revV0	GreaterLybrookUnitNo.052HOriginalHole.SurveyOriginalHole V0	W LybrookUnitNo.726HSideTrack01SurveySideTrack01 V0
GreaterLybrookUnitNo.049HOriginalHole.SurveyOriginalHole V0	W LybrookUnitNo.729HOriginalHole.SurveyOriginalHole V0	W LybrookUnitNo.726HOriginalHole.SurveyOriginalHole V0
GreaterLybrookUnitNo.050HOriginalHole.SurveyOriginalHole V0	W LybrookUnitNo.761HOriginalHole.SurveyOriginalHole V0	W LybrookUnitNo.760HOriginalHole.SurveyOriginalHole V0
GreaterLybrookUnitNo.051HOriginalHole.SurveyOriginalHole V0	W LybrookUnitNo.728HOriginalHole.SurveyOriginalHole V0	Rodeo Unit#513HOriginalHole.SurveyOriginalHole V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

WELL NAME: GREATER LYBROOK UNIT 048H**OBJECTIVE:** Drill, complete, and equip single lateral in the Mancos-I formation**API Number:** 30-045-38283**AFE Number:** DV03082**ER Well Number:** NM08277.01**State:** New Mexico**County:** San Juan**Surface Elev.:** 6,747 ft ASL (GL) 6,772 ft ASL (KB)**Surface Location:** 23-23N-09W Sec-Twn- Rng 390 ft FSL 655 ft FWL**BH Location:** 35-23N-09W Sec-Twn- Rng 541 ft FNL 235 ft FEL**Driving Directions:** FROM THE INTERSECTION OF US HWY 550 & US HWY 64 IN BLOOMFIELD, NM:

South on US Hwy 550 for 38.3 miles to MM 113.4, Right (Southwest) on CR #7890 for 0.8 miles to fork, Left (South) remaining on CR #7890 for 1.3 miles to 4-way intersection, Left (Southeast) remaining on CR #7890 for 1.2 miles to 4-way intersection; Right (West) exiting CR #7890 along existing roadway for 0.6 mile to fork; Left (West) for 0.7 miles to fork in roadway; Right (Northwest) for 0.2 miles to W LYBROOK UNIT 726H PAD & 726H EXPANSION (777H, 778H, 779H, 780H, 781H).

QUICK REFERENCE	
Sur TD (MD)	350 ft
Int TD (MD)	2,678 ft
KOP (MD)	4,894 ft
KOP (TVD)	4,553 ft
Target (TVD)	4,599 ft
Curve BUR	10 °/100 ft
POE (MD)	5,001 ft
TD (MD)	12,161 ft
Lat Len (ft)	7,160 ft

WELL CONSTRUCTION SUMMARY:

	Hole (in)	TD MD (ft)	Csg (in)	Csg (lb/ft)	Csg (grade)	Csg (conn)	Csg Top (ft)	Csg Bot (ft)
Surface	17.500	350	13.375	54.5	J-55	BTC	0	350
Intermediate	12.250	2,678	9.625	36.0	J-55	LTC	0	2,678
Production	8.500	12,161	5.500	17.0	P-110	LTC	0	12,161

CEMENT PROPERTIES SUMMARY:

	Type	Wt (ppg)	Yd (cuft/sk)	Wtr (gal/sk)	% Excess	TOC (ft MD)	Total (sx)	
Surface	TYPE III	14.6	1.39	6.686	100%	0	364	
Inter. (Lead)	10 Type III:P	12.5	2.14	12.05	70%	0	514	
Inter. (Tail)	Type III	14.6	1.38	6.64	20%	2178	150	
Prod. (Lead)	ASTM type I/I	12.4	2.370	13.4	50%	0	456	
Prod. (Tail)	G:POZ blend	13.3	1.570	7.7	10%	3723	1354	

COMPLETION / PRODUCTION SUMMARY:**Frac:** 30 plug-and-perf stages with 210,000 bbls slickwater fluid and 13,000,000 lbs of proppant (estimated)**Flowback:** Flow back through production tubing as pressures allow**Production:** Produce through production tubing via gas-lift into permanent production and storage facilities

Tops	TVD (ft KB)	MD (ft KB)
Ojo Alamo	332	332
Kirtland	437	437
Fruitland	642	642
Pictured Cliffs	1,057	1,057
Lewis	1,177	1,177
Chacra	1,412	1,415
Cliff House	2,442	2,512
Menefee	2,447	2,517
Point Lookout	3,417	3,557
Mancos	3,572	3,723
Gallup (MNCS_A)	3,904	4,078
MNCS_B	4,000	4,181
MNCS_C	4,090	4,278
MNCS_Cms	4,132	4,323
MNCS_D	4,266	4,471
MNCS_E	4,407	4,646
MNCS_F	4,462	4,726
MNCS_G	4,531	4,849
MNCS_H	4,581	4,953
MNCS_I	4,621	5,078
FTP TARGET	4,599	5,001
PROJECTED LTP	4,609	12,161

This document will be submitted with the completion package after the well has been completed.

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

ACKNOWLEDGMENTS

Action 221909

ACKNOWLEDGMENTS

Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
	Action Number: 221909
	Action Type: [C-104] Tight Hole Completion Packet (C-104CT)

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.

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CONDITIONS

Action 221909

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Operator: ENDURING RESOURCES, LLC 6300 S Syracuse Way, Suite 525 Centennial, CO 80111	OGRID: 372286
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CONDITIONS

Created By	Condition	Condition Date
plmartinez	RT EXPIRES 10/12/2023.	10/12/2023