Form 3160-5 (June 2015)

(Instructions on page 2)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

RECEIVED

NMOCD

FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018

JUN 06 2013

5. Lease Serial No. NMSF078357

SUNDRY NOTICES AND REPORTS ON WELLS

6. If Indian, Allottee or Tribe Name

1. Type of Well		.,	19 M U U								
Oil Well Gas V			NN 19	201A	8. Well Name and No. MARSHALL A 4						
2. Name of Operator ENDURING RE	SOURCES LLC	9. API Well No. 30-045-06538									
3a. Address 332 ROAD 3100 AZTE		10. Field and Pool or Exploratory Area									
		(505) 636-9722	·	~	FRUITLAND COAL						
4. Location of Well (Footage, Sec., T.,R 1370 FNL 1290 FWL SWNW S			11. Country or Parish, S SAN JUAN COUNT								
	<u> </u>										
12. CHE	CK THE APPROPRIATE B	OX(ES) TO INDICA	TE NATURE (OF NOTI	CE, REPORT OR OTH	ER DATA					
TYPE OF SUBMISSION			TYPE OF ACTION								
Notice of Intent	Acidize Alter Casing	Deepen Hydraulic	Production (Start/Resume) Water Shut-Off redraulic Fracturing Reclamation Well Integrity								
Subsequent Report	Casing Repair Change Plans	New Cons Plug and A		=	mplete oorarily Abandon	✓ Other					
Final Abandonment Notice	Convert to Injection	Plug Back		Wate	r Disposal						
the Bond under which the work will completion of the involved operation	Ily or recomplete horizontall I be perfonned or provide the ons. If the operation results in tices must be filed only after	ly, give subsurface loc e Bond No. on file wi n a multiple completic all requirements, incl	cations and me th BLM/BIA. I on or recomple luding reclama	asured an Required etion in a stion, have	d true vertical depths of subsequent reports must new interval, a Form 310 be been completed and th	all pertinent markers and zones. Attach to be filed within 30 days following 60-4 must be filed once testing has been e operator has detennined that the site					
					_	E.					
5/22/2018 MIRU. 70 psi csg. 0 TOH w one 1.25in x 16 spray r 7075in slick rods, 12 -1.25in RHAC-Z rod pump w 1ft strain TOH w 64 jt. Found 17 Bad jts TOH w 6 drill collars, bit sub, X	metal polish rod; one .75ir sinker bars; one 3ft pum er nipple. ND WH, NU BG due to rod wear. 14 test	n X 4ft pony rod; one p stabilizer and 2in OP. Unseat tbg hang ted blue, 3 tested gr	e .75in X 6ft x 1.25in x13 ger. RU scar	pony rod Ift x 13ft	; ACCE	PTED FOR RECORD					
5/23/2018 PU 13 jts J-55 yellor Circulated well w air, water plu Waited to see if fill comes in. f Drilled out bridge plug. PU 3 jt Well circulating at 12bbls an hr Shut down air unit. RIH w 3 jts	s foam at 12 bbl per hr. F RIH w 7 jts, tagged bridge is 2.375in J-55 yellow ban r. PU 3 jts up to 2100ft. Ci	POH w 7 jts, set abo plug, no fill came in d tbg. Cleaned out rculated half hr. Pu	ove perfs. Sh n. Started air to 2195.98ft. Imping only a	ut down pack, pu ir last 10	air, water. mp. FARM min.	JUN 14 2018 INGTON FIELD OFFICE					
PLEASE SEE ATTACHED PAG	GE FOR REMAINDER OF	PROCEDURE. AL	LSO ATTACH	HED IS A	CURRENT WELL BO	DRE DIAGRAM.					
14. I hereby certify that the foregoing is APRIL E POHL	true and correct. Name (Pri		REGULATORY SPECIALIST Title								
Signature April E	Pohl	Date	6/6	/18	<u> </u>						
	THE SPACE	FOR FEDERA	L OR STA	TE OF	ICE USE						
Approved by			Title		Da	ate					
Conditions of approval, if any, are attach certify that the applicant holds legal or e which would entitle the applicant to cond	quitable title to those rights:		Office		1						
Title 18 U.S.C Section 1001 and Title 43 any false, fictitious or fraudulent statemen				and will	fully to make to any dep	artment or agency of the United States					

Remainder of procedure:

814 w 5 stds, tagged up @ 2195.78ft. No fill. POH tbg, LD drill collars, xover, bit sub and bit.

RIH w one-.35 COLLAR, one-11.80 pony jt, one-4.10 perf sub, one - 1.10 S/N, 66 jts 2.375in J55

yellow band tbg. Landed well @ 2127.72ft. ND BOP, NU WH.

RIH w one -2X1.25in 4X10 RHAC rod pump w 1ft strainer, one 3ft pump stabilizer, four 1.25in sinker bars, nine -.75in, 4 per guided rods, 70-.75in slick rods, two 6-2ft .75in pony rods, one- 4ft .75in pony rod and one 1.25in spray metal polished rod.

Loaded tbg w 6 bbl, pressure test to 500 psi. Good test. Stroked pump w rig to 300 psi twice, test good. Installed horses head, slow gear rod rotator, hung off polished rod. Put well on prod. SDFN.

5/225/18 RDMO.

WeiView

ERC - Current WBD with Stim Data

Well Name: Marshall A-4

	Surface Legal Location Sec 15, Twp 27N, Rng 9W			Well Configuration Type Land
Original KB Elevation (ft) 6,112.00			PBTD (All) (ftKB) Original Hole - 2,196.0	Total Depth All (TVD) (ftK8)

6,112.00	0			5/6/1	956 00:00	6	/1/19	56 00:00		Or	nginal Ho	te - 2,1	96.0	<u>i</u>				
	Land (Original Ho	le. 6/6	5/2018 7:44:57 AM		Casir	ng St	rings				,						
MD	Carra, C	origina.	,	1	710		Csg	Des	OD		//t/Len (lb/ft)		de	Top The	ead (ftK		Set Depth (ftKB)	
(ftKB	Vertical schematic (actual)			Zone (Contact interval)		Surface Casing			3 5/8		0 H-40				7.0	138.0		
,						l		Casing		5 1/2	14.00	J-55		<u> </u>		7.0	2,205.0	
						Descrip						Commer						
**		П		ļ				asing Ceme	nt			150 sx		t				
	Des:Tubing	'	Descrip			Commer												
"	Hanger; OD:2 3/8 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)				Production Casing Cement						150 sx Commer							
7.0					queeze						s B cmt							
	MD:7.8 ftKB		11		'	Tubir	ng St	rings										
9.5	Des:Surface	H	\mathbf{H}			Tubing			Run Dat			String Le		(ft)	Set Depth			
,,,	Casing Cement; Depth MD:7.0-					Tubin	g		5/24/2	1018	TI	2,117.	<u> </u>	— т	2,124.7		T Wt	
"	138.0 ftKB; Date:5/6/1956					Jts -		Item De	s		OD (in)	Len (ft)		Top (ftKB)	Btm (ftKB)	Grade		
154	Des:Surface					66 T		g Hanger			2 3/8	0.7 2,099		7.0	7.8 2,107.4	J-55	4.60	
	Casing; OD:8 5/8 in; Wt.:32.00 lb/ft;	H III				"	ubing	y			2 3/6	2,000	7	7.0	2,107.4	3-33	4.00	
194	Grade:H-40; Btm	H H	11			1 F	ump	Seating Nip	ple		2 3/8	1.1	0	2,107.4	2,108.5	\vdash	†	
135,	MD:138.0 ftKB Des:Production		H			1 P	erfor	ated Joint			2 3/8	4.1	0	2,108.5	2,112.6			
""	Casing Cement; Depth MD:7.0-					1 T	ail Jo	oint			2 3/8	11.8		2,112.6	2,124.4		I	
1,769 4	2,205.0 ftKB;					1 B	Bull P	lug			2 3/8	0.3	55	2,124.4	2,124.7			
	Date:5/10/1956	3 111				Rod S	String	gs										
1,970 1		1 W		,	Fruitland Coal	Rod Description Rod String			Run Date 5/24/2018			String Length (ft)		Set Depth				
1,000				Des:Delta Frac; Depth MD:1,985.0-		Jts	T		m Des	.010		OD (in)		Len (ft)	2,108.5 Top (ftK		tm (ftKB)	
1,,,,,,,		13 M		2,088.0 ftKB; Date:4/8/2004		1	Poli	shed Rod				11		16.00		3.5	9.5	
1,994.4	ı	salvatadas L	1.	Des:Perf; Depth				y Rod					/4	2.00		9.5	11.5	
		4 11	MD:1,985.0- 2,088.0 ftKB;			1 Pony Rod				3/-			4.00		1.5	15.5		
2.047 9	1			Date:12/8/2003		<u> </u>		y Rod					/4	4.00		5.5	19.5	
			(:	l	70 Sucker Rod 9 Guided Rod						/4	1,750.00 225.00			1,769.5 1,994.5		
2,049 8		4 14				4		ker Bar						100.00			2,094.5	
2,084 5	3 M f				1 Rod Centralizer					1 1/4 100.00 1 1/4 3.00				2,097.5				
														2,108.5				
2,067.4		1 111				Perfo	ratio	ns					_					
	F= = = = = = = = = = = = = = = = = = =		1	ļ					T							Enter ed		
2,107 3	Des:Pump Seating Nipple; OD:2 3/8						_		1						Shot Dens	Shot	Nom Hole	
2,107 9	in; ID:2.00 in; Top MD:2,107.4 ftKB;					Fruitla		Cone Coal	12/8	Date 3/2003		985.0		m (ftKB) 2,088.0	(shots/ft)	Total	Dia (in)	
	Btm MD:2,108.5	1 1			Pictured Cliffs	Original Hole				''			2,000.0			,		
2,108 6	ftKB					Pictured Cliffs, Original Hole			6/1/1956 2		2,112.0		2,158.0					
						1			<u>L</u>			l						
2,1100		₹ 900	\$			Sumi	ııatio	n Intervals	inter				_					
2,1119	Des:Tubing; OD:2 3/8 in; ID:2.00 in;	18 000	8						val Num						Voi Siur	"I.	Proppant	
	Top MD:7.1 ftKB;		- Ariente de la companya de la compa		i	Zone Fruitland Coal, Original Hole		ber Start Date			Top (ftKB		8tm (ftKB)	Total (bl	bi) To	tal OR (lb)		
2,1125	Btm MD:2,124.7 ftKB	3 1	X					1	4/8/20	04	1,985.0 2,088		2,088.0) 0.	00 1	155,000. 0		
2,124 3	Des:Cement Squeeze; Depth	3	-					n intervals										
	MD:2,111.0-	∛ □	<u> </u>						Inter				Т			\top		
2,1247	2,159.0 ftKB; Date:12/5/2003		2	Des:Perf; Depth MD:2,112.0-					va! Num		l _{PB}	reakdowr	, P	Treat Max	P Treat Av	g Fra	c Gradient	
	Des:Plug Back	a a la	2	2,158.0 ftKB;		Ce :141		one	ber	ISIP	(psi)	(psi)	+	(psi)	(psi)		(psi/ft)	
2,158 1	Total Depth; Depth MD:2,196.0 ftKB;	18		Date:6/1/1956		Fruitla Origin		•	1									
2,189 1	Date:5/23/2018 Des:Production	1	Ś.			_			Ц	L			ــــــــــــــــــــــــــــــــــــــ			—		
""	Casing Cement	3		-		Fluid Systems Interval Number		T T				<u> </u>				T		
2,168.0	(plug); Depth MD:2,196.0-	N		<u>]</u>				Fluid Name			Fluid Type			+-	Vol (bbl)			
	2,205.0 ftKB;	4													—			
2,195 9	Date:5/10/1956 Des:Production	E ROYALES	1															
	Casing; OD:5 1/2 in; Wt.:14.00 lb/ft;																	
2,205 1	Grade:J-55; Btm	<u></u>	: 6 1			1												
<u> </u>	MD:2,205.0 ftKB																	
						1												