

**KERR-MCGEE OIL AND GAS ONSHORE LP**

**WILLIAMS 9-20**

**NW SE 20 2N 68W 1,588' FSL 1,497' FEL**

**WELD, COLORADO**

**11/15/2013**

**AREA: S2**

**ROUTE: S22**

**Spud: 04/22/2009**

**WINS No.: 00321**

**AFE/WO#: 88415329**

**API#: 0512328047**

**GL: 4901**

**KB: 4916**

**MTD: 7840**

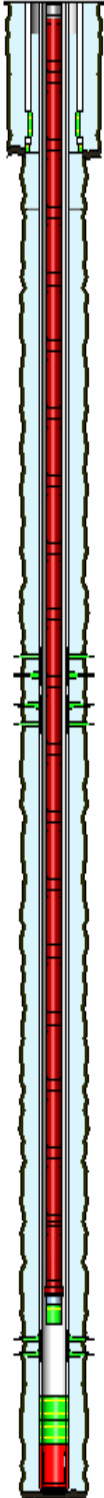
**TVD: 7712**

**LOG MD: 7821**

**PBMD: 7796**

**PBTVD: 7669**

**Directions: WCR 20 & WCR 7, W 2/10, SW 3/4 & NW INTO**



<u>HOLE SECTIONS</u>	<u>Size</u>	<u>Top</u>	<u>Btm</u>	<u>TD Date</u>					
SURFACE	12.25	15	785	04/23/2009					
PRODUCTION	7.88	785	7840	04/26/2009					
<u>TUBULARS</u>	<u>Tool Type</u>	<u>Joints</u>	<u>Size</u>	<u>Weight</u>	<u>Grade</u>	<u>Thread</u>	<u>Top D</u>	<u>Bottom D</u>	
SURFACE CASING	Casing	16	8.63	24.00	J-55	ST&C	15	727	
	Baffle	1	8.10				727	727	
	Casing	1	8.63	24.00	J-55	ST&C	727	772	
	Saw Tooth Shoe	1	9.00				772	773	
PRODUCTION CASING	Casing	186	4.50	11.60	I-80	LTC	15	7796	
	Latch Down Baffle	1	4.50				7796	7796	
	Shoe Joint	1	4.50	11.60	I-80	LTC	7796	7828	
	Casing Float Shoe	1	4.50				7828	7829	
PRODUCTION TUBING	Tubing	242	2.38		J-55	8RD EUE	15	7581	
	Seating Nipple		2.38				7581	7583	
	Notched Collar		2.38				7583	7583	
PRODUCTION TUBING	Wellbore Equipment	241	2.38		J-55		15	7580	
	Wellbore Equipment	1	2.38				7580	7581	
	Wellbore Equipment	1			J-55		7581	7582	
<u>CEMENT JOBS</u>	<u>Stage</u>	<u>Sacks</u>	<u>Cement Jobs</u>				<u>Top D</u>	<u>Btm D</u>	<u>cbf</u>
SURFACE CASING	PRIM CMT 1ST STAGE	490	LEAD	TYPE 3			15	775	No
PRODUCTION CASING	PRIM CMT 1ST STAGE	915	LEAD	ECONOCEM			700	6970	Yes
	PRIM CMT 1ST STAGE	160	TAIL	FRACCEN			6970	7840	Yes
PRODUCTION CASING	ONE INCH JOB	255	DISPLAC	FRESH WATER			226	1512	Yes
<u>PERFORATIONS</u>									
<u>Formation</u>	<u>Zone</u>	<u>Top</u>	<u>Btm</u>	<u>Date</u>	<u>Reason</u>	<u>Comments</u>			
NIOBRARA	A	7392	7396	09/08/2009	PRODUCTION				
NIOBRARA	B	7472	7486	09/08/2009	PRODUCTION				
CODELL		7624	7644	09/04/2009	PRODUCTION				

**Comments:**