



Well History

Well Name: McCarty 28-8

API 05123137540000	Surface Legal Location NENE 28 4N 67W		Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,898.00	Original KB Elevation (ft) 4,908.00	KB-Ground Distance (ft) 10.00	Spud Date 1/20/1988 00:00	Rig Release Date 3/27/1988 00:00	On Production Date 5/31/1988

Daily Operations

Start Date	Summary	End Date
8/23/2013	STP 150#; SCP 120; ETP 0, ECP BLOW; SFL 3000'; 1 Run, Swabbed up drilling mud. Shut in.	8/23/2013
4/10/2014	<p>ITP 150 psi, ICP 200 psi, unable to blow down through production equipment, SSCP 0 psi, held safety meeting, MIRU Bayou 008, blew well down to rig tank, circulated well w/100 bbls Claytreat/Biocide water rolling all oil and gas out of well bore, held safety meeting, ND WH, NU BOP, spotted in tubing float provided by ATP, changed equipment over to pull 1 1/2" 2.76# tbg, POOH tallying out w/production tbg LD to trailer w/ 217 jts 1 1/2" 2.76# 1J tbg, 1-10' subs, tubing was landed at 7,312.48', spotted in 1 1/4" CS Hydril WS provided by Jones Trucking, changed equipment over to run 1 1/4" WS, PU STS's 2 1/4" blade git - 2 7/8" csg scraper and change over to 1 1/4", TIH w/CS Hydril WS from trailer delivered out by Jones Trucking, TIH w/ 1 1/4" CS Hydril WS and STS's 2 1/4" blade git - 2 7/8" csg scraper, circulated down to 7,150.64' KB and tools w/230 jts, rolled hole clean, TOOHD 230 jts onto trailer, shut and locked blind rams on BOP's, SI and isolate well, drained lines and pump, prepared for next day operations. SDFN.</p> <p>NOTE: Visually inspected 1 1/2" production string, most pins appears to be in bad condition, will be hauled and sold to ATP classified as Grade D tubing.</p>	4/10/2014
4/11/2014	<p>0 psi @ WH, held safety meeting, opened well to rig tank, held safety meeting, MIRU Nabors Wireline, TIH w/ wireline set cast iron plug, correlated with logs, set cast iron plug @ 6,870', TOOHD LD setting tool, TIH w/ dump bailer and two sacks of cement, spotted cement on top of plug, TOOHD w/wireline, loaded 2 7/8" casing w/ 24 bbls Claytreat/Biocide water, attempted to pressure test casing, pressured up to 1500 psi, bled off to 1000 psi in 5 mins, bled pressure off, pressured up again to 1500 psi, bled off to 1350 in 7 mins, possible holes in casing, PU CBL tools, ran GR/CCL/CBL/VDL log from 6000' to surface, original cmt top to 5,846 w/ signs of stringers up to 5,786', LD logging tool, MI Vaughn Energy Services, held safety meeting, PU gyro tools, TIH w/ gyro, gyro'd well bore from surface to 6,750', TOOHD w/ wireline and gyro tool, LD gyro tool, RDMO Vaughn Energy Services, held safety meeting, opened well to rig tank, ND BOP's, ND WH, PU landing sub, unland casing, PU to 70K, removed slips, stacked casing out, NU BOP's, PU worked casing for 0-70K getting 90" of stretch, estimated free pipe to 5,824.24', pulled casing to 45k, set in rig slips, installed stabbing vavle, shut pipe pipe rams, MIRU Nabors Wireline, held safety meeting, TIH w/jet cutter set up for 2 7/8" casing, correlated logs, got on depth, cut casing at 5,700', TOOHD w/ tools, RD wireline, PU on casing, casing was free, pulled to next connection, LD sub, TOOHD standing back to derrick, stood back 180 jts 2 7/8" 6.5# casing plus 8' cut piece, shut and locked blind rams on BOP's, SI and isolated well, drained lines and tank, prepared for next day operations. SDFWE.</p>	4/11/2014
4/14/2014	<p>Shut Open Hole Pressure 0 psi, SSCP 0 psi, held safety meeting, opened well to rig tank, held safety meeting, RU Pick Testers, PU 2 7/8" mule shoe, TIH w/ 2 7/8" production casing from derrick testing to 6000 psi, all jts tested good, RD tester, tagged casing stub at 5,700.34' w/ 181 jts of tubing, LD jt # 181, RU circulating equipment, on jts # 180 establish circulation, rolled for 5 1/2 hours bringing bottoms up 1.5 times, circulated all gas out of well bore, TOOHD standing back w/ 30 jts, leaving EOT @ 4,728.02' w/ 150 jts, installed TIW valve provided by STS, shut and locked pipe rams on BOP's, shut in and isolated well, drained lines and pump, prepared for next day operations. SDFN.</p>	4/14/2014
4/15/2014	<p>0 psi @ WH, held safety meeting, PU TIH w/ 30 jts 2 7/8" 6.5# J-55 tubing putting EOT at 5,678.99' w/ 180 jts, RU circulating equipment, broke circulation, rolled hole for 2 hours bringing back light mud no oil RD circulating equipment, MI&RU Baker Hughes Cement Services to 2 7/8" 6.5# J-55 tubing, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Preflush: Pumped 10 bbl fresh water to establish circulation</p> <p>1st stage:EOT set @ 5,678.99' w/180 jts,mix, batch, and pump 50 sk G&E 15.8 ppg 1.15 yield (10.24 bbls) Displace 28.5 bbls (3.9 bbls early calculated on a 10" open hole) balancing the plug, Est. TOC @ 5,573.59', lay down 20 jts, RU rig circulation equipment, broke circulation, EOT @ 5,047.99 w/ 160 jts, pumped tubing capacity, flushing tubing, TOOHD LD w/ 33 jts.</p> <p>2nd stage:EOT set @ 4,007.04' w/127 jts,mix, batch, and pump 175 sks Econocem 13.5 ppg 1.71 yield (53.29 bbls) Displace 19 bbls (1.2 bbls early) balancing the plug, Est. TOC @ 3,458.47', lay down 40 jts, EOT @ 2,744.98' w/ 87 jts, RU rig circulation equipment, broke circulation, pumped tubing capacity, flushing tubing, TOOHD LD w/ 64 jts.</p> <p>3rd stage:EOT set @ 728.96' w/23 jts, mix,batch and pump 200 sks of G&E 15.8 ppg 1.15 yield (40 bbls), Baker's pump truck packed off on the supply side of truck, attempted to clear system, unable to bring on material, pumped 3 bbls fresh water balancing plug, RD Baker, TOOHD LD w/ 23 jts, SI and isolated well, shut and locked blind rams on BOP's, drained lines and pump, prepared for next day operations, Baker will return next day to complete surface plug. SDFN.</p>	4/15/2014
4/16/2014	<p>0 psi @ WH, held safety meeting, PU TIH w/ 16 jts 2 7/8" 6.5# J-55 tubing tagging cement top @ 497.52'. MIRU Baker Hughes Cement Services to 2 7/8" 6.5# J-55 tubing, hold JSA and procedure meeting.</p> <p>Pressure test lines to 3,500 psi</p> <p>Preflush: Pumped 10 bbl fresh water to establish circulation, 10bbl mud flush, 5 bbls Claytreat water</p> <p>1st stage:EOT set @ 497.52' w/16 jts, mix,batch and pump 400 sks of G&E 15.8 ppg 1.15 yield (82 bbls), returned 8 bbls cement to tank, Displace 1.0 Bbls, RD Baker, TOOHD laying down w/ 13 jts, RU Baker, pumped an addition 6 bbls of cement to tank topping off, TOOHD w/ remaining 3 jts 2 7/8" 6.5# J-55, RD and released Baker. SI and isolated well, shut and locked blind rams on BOP's, drained lines and pump, prepared for next day operations, SDFN.</p>	4/16/2014



Well History

Well Name: **McCarty 28-8**

API 05123137540000	Surface Legal Location NENE 28 4N 67W			Field Name Wattenberg	State CO	Well Configuration Type Vertical
Ground Elevation (ft) 4,898.00	Original KB Elevation (ft) 4,908.00	KB-Ground Distance (ft) 10.00	Spud Date 1/20/1988 00:00	Rig Release Date 3/27/1988 00:00	On Production Date 5/31/1988	

Daily Operations

Start Date	Summary	End Date
4/17/2014	0 psi @ WH, held safety meeting, PU TIH w/ 1 jts of 2 7/8" tubing tagging cement top at 5' (312' inside of surface casing), MIRU roustabouts, dug around well head, MIRU welder, cut off 8 5/8" surface casing 6' below ground level, welded cap onto surface casing, RD welder, backfilled burying capped casing. RD roustabouts. FINAL REPORT	4/17/2014

CEMENT JOB REPORT



CUSTOMER PETROLEUM DEVELOPMENT		DATE 15-APR-14		F.R. # 10011060368		SERV. SUPV. STEPHEN J CARDOS	
LEASE & WELL NAME MCCARTY #28-8 - API 05123137540000		LOCATION 28-4N-67W		COUNTY-PARISH-BLOCK Weld Colorado			
DISTRICT Brighton		DRILLING CONTRACTOR RIG # WO		TYPE OF JOB Plug & Abandon			
SIZE & TYPE OF PLUGS		LIST-CSG-HARDWARE		MECHANICAL BARRIERS		MD	TVD
N/A		N/A		N/A		0	0
						HANGER TYPES	MD
						N/A	0
						TVD	0
PHYSICAL SLURRY PROPERTIES							
MATERIALS FURNISHED BY BJ		LAB REPORT NO.	SACKS OF CEMENT	SLURRY WGT PPG	SLURRY YLD FT³	WATER GPS	PUMP TIME HR:MIN
Fresh Water		N/A	0	8.34	0	0	03:30
Treated Water (Claycare)		N/A	0	8.3	0	0	00:00
Plug 1		N/A	50	15.8	1.15	4.99	04:00
Treated Water (Claycare)		N/A	0	8.3	0	0	00:00
Plug 2		N/A	175	13.5	1.71	8.30	00:00
Fresh Water		N/A	0	8.3	0	0	00:00
Treated Water (Claycare)		N/A	0	8.3	0	0	00:00
Plug 3		N/A	600	15.8	1.16	5.01	00:00
Fresh Water		N/A	0	8.3	0	0	00:00
Mudclean I		N/A	0	8.34	0	0	00:00
Treated water (Claycare)		N/A	0	8.34	0	0	00:00
Available Mix Water 400		Bbl.	Available Displ. Fluid 400		Bbl.	TOTAL	
						300.05 112.05	
HOLE		TBG-CSG-D.P.				COLLAR DEPTHS	
SIZE	% EXCESS	DEPTH	ID	OD	WGT.	TYPE	MD
10	0	7200	4	4.5	11.6	CSG	0
							TVD
							0
							GRADE
							N-80
LAST CASING		PKR-CMT RET-BR PL-LINER		PERF. DEPTH		TOP CONN	
ID	OD	WGT	TYPE	MD	TVD	BRAND & TYPE	DEPTH
8.1	8.63	24	CSG	415	415	NO PACKER	0
							TOP
							0
							BTM
							0
							SIZE
							2.875
							THREAD
							8RND
							TYPE
							WATER BASED
							WGT.
							8.4
DISPL. VOLUME		DISPL. FLUID		CAL. PSI	CAL. MAX PSI	OP. MAX	MAX TBG PSI
VOLUME	UOM	TYPE	WGT.	BUMP PLUG	TO REV.	SQ. PSI	RATED
30	BBLS	Fresh Water	8.34	0	0	0	0
		Fresh Water	8.3				
							Operator
							3832
							Operator
							2832
							MIX WATER
							FRAC TANK
Circulation Prior to Job							
Circulated Well: Rig <input type="checkbox"/> BJ <input checked="" type="checkbox"/>				Circulation Time: .25		Circulation Rate: 2 BPM	
Mud Density In: 8.4 LBS/GAL				Mud Density Out: 8.4 LBS/GAL		PV & YP Mud In: 0	
						PV & YP Mud Out: 0	
Gas Present: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>				Units:		Solids Present at End of Circulation: NO <input checked="" type="checkbox"/> YES <input type="checkbox"/>	
Displacement And Mud Removal							
Displaced By: Rig <input type="checkbox"/> BJ <input checked="" type="checkbox"/>				Amount Bled Back After Job: 1 BBLS			
Returns During Job: <input type="checkbox"/> NONE <input type="checkbox"/> PARTIAL <input checked="" type="checkbox"/> FULL				Method Used to Verify Returns: VISUAL			
Cement Returns at Surface: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO				Were Returns Planned at Surface: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES			
Pipe Movement: <input type="checkbox"/> ROTATION <input type="checkbox"/> RECIPROCATION <input checked="" type="checkbox"/> NONE <input type="checkbox"/> UNABLE DUE TO STUCK PIPE							
Centralizers: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES				Quantity: 0		Type: <input checked="" type="checkbox"/> BOW <input type="checkbox"/> RIGID	
Job Pumped Through: <input type="checkbox"/> CHOKE MANIFOLD <input type="checkbox"/> SQUEEZE MANIFOLD <input type="checkbox"/> MANIFOLD <input checked="" type="checkbox"/> NO MANIFOLD							
Plugs							
Number of Attempts by BJ: 0		Competition: 0		Wiper Balls Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		Quantity:	
Plug Catcher Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Parabow Used: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES			
Was There a Bottom: <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES				Top of Plug: 0 FT		Bottom of Plug: 0 FT	
EXPLANATION: TROUBLE SETTING TOOL, RUNNING CSG, ETC. PRIOR TO CEMENTING: NONE							
PRESSURE/RATE DETAIL				EXPLANATION			

CEMENT JOB REPORT



Squeezes (Update Original Treatment Report for Primary Job)

BLOCK SQUEEZE ☐ SHOE SQUEEZE ☐ TOP OF LINER SQUEEZE ☐ PLANNED ☐ UNPLANNED ☐
 Liner Packer: ☒ NO ☐ YES Bond Log: ☒ NO ☐ YES PSI Applied: 0 Fluid Weight: 0 LBS/GAL

Casing Test (Update Original Treatment Report for Primary Job)

Casing Test Pressure: 0 PSI With 0 LBS/GAL Mud Time Held: 00 Hours 00 Minutes

Shoe Test (Update Original Treatment Report for Primary Job)

Depth Drilled out of Shoe: 0 FT Target EMW: 0 LBS/GAL Actual EMW: 0 LBS/GAL
 Number of Times Tests Conducted: 0 Mud Weight When Test was Conducted: 0 LBS/GAL

Problems Before Job (I.E. Running Casing, Circulating Well, ETC)
 CEMENT NOT LOADED

Problems During Job (I.E. Lost Returns, Equipment Failure, Bulk Delivery, Foaming, ETC)
 B-SIDE DECK ENGINE LOSING OIL ,COULD NOT USE, STOP PUMPING CEMENT DUE TO PUMP PROBLEMS

Problems After Job (I.E. Gas at Surface, Float Equipment Failed, ETC)
 NONE


PRESSURE/RATE DETAIL

EXPLANATION

TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>		
	PIPE	ANNULUS				TEST LINES	3263 PSI	
						CIRCULATING WELL - RIG	<input type="checkbox"/>	BJ <input checked="" type="checkbox"/>
07:45	0	0	0	0	N/A	LEAVE YARD		
08:30	0	0	0	0	N/A	ARRIVE ON LOCATION		
09:00	0	0	0	0	N/A	SPOT TRUCKS		
09:10	0	0	0	0	N/A	PRE RIG UP SAFETY MEETING		
09:50	0	0	0	0	N/A	SAFETY MEETING		
10:04	3263	0	0	0	H2O	PRESSURE TEST		
10:10	434	0	2.5	3	CLAY	FRESH WATER SPACER		
10:13	23	0	1.3	9.2	CMT	BATCH/WEIGH/PUMP 15.8LB CEMENT		
10:27	38	0	2.6	30	H2O	DISPLACEMENT		
10:42	0	0	0	0	N/A	DOWN/PULL PIPE		
11:21	285	0	2.4	12.5	H2O	FRESH WATER SPACER		
11:31	67	0	2.5	49	CMT	BATCH/WEIGH/PUMP 13.5LB CEMENT		
11:54	37	0	2.6	19.5	H2O	DISPLACEMENT		
12:03	0	0	0	0	N/A	DOWN/PULL PIPE		
13:05	68	0	2.6	14	H2O	CLAY SPACER		
13:13	32	0	2.8	2.8	CMT	BATCH/WEIGH/PUMP 15.8LB CEMENT		
14:20	15	0	2.6	3	H2O	UNABLE TO MIX CEMENT SHUT DOWN/DISPLACE		
16:00	0	0	0	0	N/A	LEAVE LOCATION		
17:00	0	0	0	0	N/A	ARRIVE AT YARD		
06:00	0	0	0	0	N/A	LEAVE YARD(4/16/14)		
06:45	0	0	0	0	N/A	ARRIVE ON LOCATION		
06:50	0	0	0	0	N/A	SPOT TRUCKS		
06:55	0	0	0	0	N/A	PRE RIG UP SAFETY MEETING		
07:44	0	0	0	0	N/A	SAFETY MEETING		
07:48	3853	0	0	0	H2O	PRESSURE TEST		
07:53	77	0	2.4	10	H2O	CLAY CARE SPACER		
07:58	79	0	2.5	10	H2O	MUD CLEAN SPACER		
08:02	55	0	2.5	5	H2O	FRESH WATER SPACER		
08:05	102	0	2.5	55	CMT	BATCH/WEIGH/PUMP 15.8 LB CEMENT		
08:33	228	0	2.4	1	H2O	DISPLACEMENT		
08:47	15	0	2.4	4	CMT	PUMP TOP OUT 15.8 LB CEMENT		
08:51	5	0	2.4	.5	H2O	DISPLACE		

CEMENT JOB REPORT



PRESSURE/RATE DETAIL						EXPLANATION	
TIME HR:MIN.	PRESSURE - PSI		RATE BPM	Bbl. FLUID PUMPED	FLUID TYPE	SAFETY MEETING: BJ CREW <input checked="" type="checkbox"/> CO. REP. <input checked="" type="checkbox"/>	
	PIPE	ANNULUS				TEST LINES	3263 PSI
						CIRCULATING WELL - RIG <input type="checkbox"/> BJ <input checked="" type="checkbox"/>	
08:52	0	0	0	0	H2O	JOB DONE	
BUMPED PLUG Y <input checked="" type="checkbox"/> N	PSI TO BUMP PLUG 0	TEST FLOAT EQUIP. Y <input checked="" type="checkbox"/> N	BBL.CMT RETURNS/ REVERSED 0	TOTAL BBL. PUMPED 0	PSI LEFT ON CSG 0	SPOT TOP OUT CEMENT Y <input checked="" type="checkbox"/> N	Service Supervisor Signature: 



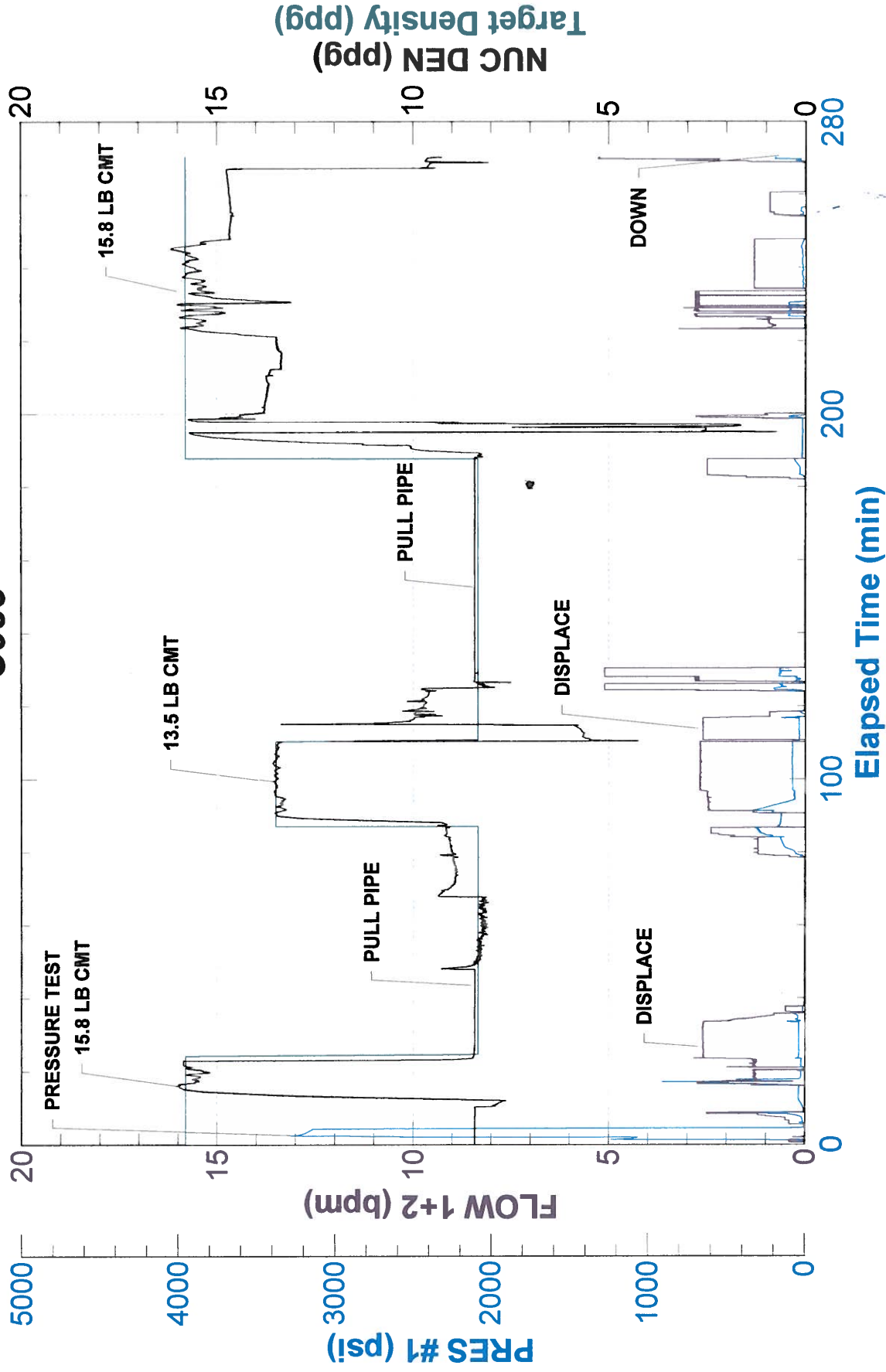
Baker Hughes JobMaster Program Version 3.60

Job Number: 10011060368

Customer: PDC

Well Name: MCCARTY 28-8

C085



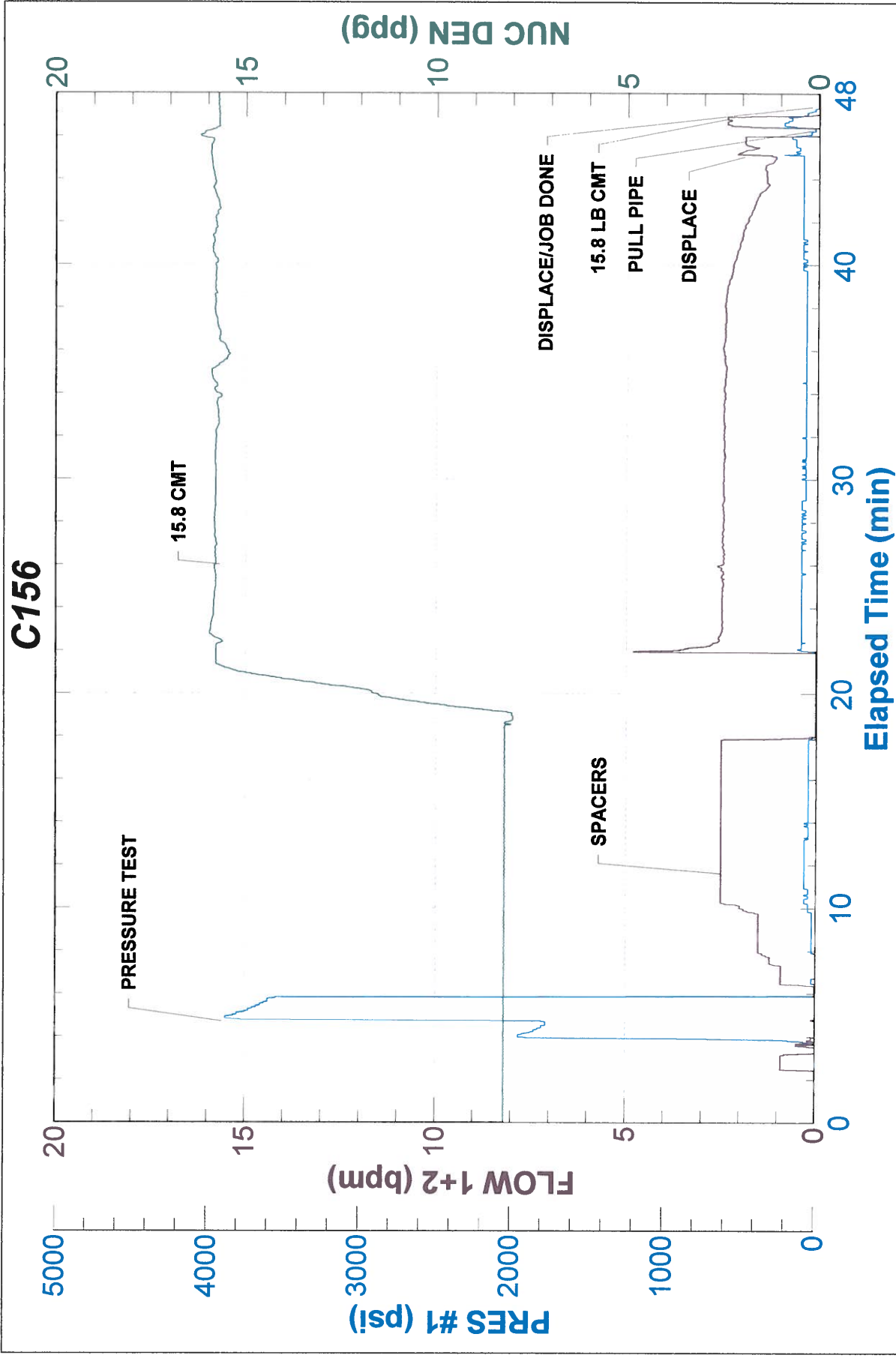


Baker Hughes JobMaster Program Version 3.60

Job Number: 10011060368

Customer: PDC

Well Name: MCCARTY 28-8





NABORS

PLEASE REMIT TO:
NABORS COMPLETION & PRODUCTION SERVICES CO.
P.O. BOX 975682
DALLAS, TX 75397-5682
435-725-5344

FIELD TICKET No. 20345

DELIVERED FROM 45

DATE 4-11-14

CUSTOMER NO.	LEASE <u>McCoity 28-8</u>	WELL NO.
CUSTOMER <u>PDC</u>	FIELD <u>Waltham</u>	STATE <u>CO</u> COUNTY <u>Weld</u>
ADDRESS	LOCATION <u>19+42</u>	INVOICE NO.
CITY	CASING SIZE & WT. <u>2 7/8"</u>	P.O. NO.
STATE	TYPE OF JOB <u>Plug & Cement</u>	AFE NO.
ZIP		

ORDERED BY		TITLE		SERVICE SUPV.						
PART NO.	DESCRIPTION	REV. CODE	QTY.	UNIT PRICE	DISC.	AMOUNT				
75 820-0023	Set 2 7/8" CIBP (STB)		6890'			\$ 3200 ⁰⁰				
70 299-0200	Deep Drill Cement (Per)		6890'	\$ 25.64		\$ 1722 ⁵⁰				
70 212-0200	CBL CPS Chase		6800'	\$ 30.64		\$ 2090 ⁰⁰				
70 214-0200	CBL Depth Charge		6800'	\$ 30.64		\$ 2090 ⁰⁰				
70 210-1111	Coring 6 1/2"		6800'	\$ 30.64		\$ 2090 ⁰⁰				
70 255-0100	Pack off					\$ 900 ⁰⁰				
70 252-0023	Set cut, 2 7/8" Casing		5683'	5700		\$ 1700 ⁰⁰				
70 210-1111	Full Throat					\$ 310 ⁰⁰				

TOTAL SERVICE & MATERIALS

TAX % 3.35 TAXABLE AMT 4452

WITH MY INITIALS, I CONFIRM THAT THE TIME SHOWN IN THE "HOURS" COLUMN, ACCURATELY REFLECTS MY COMPENSABLE TIME.

TOTAL CHARGES 9100

Employee Name (Print)

John M. Shaw

CUSTOMER AGREES to pay Nabors Completion & Production Services Co. (the "Company") on a net 30 day basis from date of invoice. If Customer disputes any item invoiced, Customer shall, within 20 days after receipt of invoice, notify the Company of the item(s) disputed, specifying the reason(s) therefor; payment of the disputed item(s) may be withheld until settlement of dispute, but payment of undisputed portion of invoice shall be made without delay. All payments shall be made at the address shown on the reverse side of this document. In the absence of a separate written contract, CUSTOMER REPRESENTATIVE REPRESENTS AND WARRANTS THAT HE/SHE IS AUTHORIZED TO ENTER INTO THIS AGREEMENT ON BEHALF OF CUSTOMER AND ACCEPTS ALL TERMS AND CONDITIONS AS PRINTED ON THE REVERSE SIDE OF THIS DOCUMENT (WHICH INCLUDES INDEMNITY LANGUAGE THAT ALLOCATES RISKS RELATED TO THE ABOVE DESCRIBED SERVICES). Pricing and extensions, if shown above, are subject to verification and correction at time of invoicing.

NABORS COMPLETION & PRODUCTION SERVICES CO.

CUSTOMER REPRESENTATIVE