



FOR INVOICE AND
TICKET NO. _____

[illegible]

WELL DATA

FIELD Hayden SEC. 18 TWP. 7N RNG. 86W COUNTY Butte STATE Colo

FORMATION NAME _____ TYPE _____

FORMATION THICKNESS _____ FROM _____ TO _____

INITIAL PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

PRESENT PROD: OIL _____ BPD. WATER _____ BPD. GAS _____ MCFD

COMPLETION DATE _____ MUD TYPE _____ MUD WT. _____

PACKER TYPE _____ SET AT _____

BOTTOM HOLE TEMP. _____ PRESSURE _____

MISC. DATA _____ TOTAL DEPTH _____

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	<u>U</u>	<u>32</u>	<u>9 7/8</u>	<u>0</u>	<u>330</u>	
LINER						
TUBING	<u>U</u>	<u>16.6</u>	<u>4 1/2</u>	<u>0</u>	<u>VARY</u>	
OPEN HOLE			<u>8 1/4</u>	<u>330</u>	<u>3500'</u>	SHOTS/FT.
PERFORATIONS						
PERFORATIONS						
PERFORATIONS						

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER <u>4 1/2 x 4 DP Pin</u>	<u>1ea</u>	<u>Halw</u>

MATERIALS

TREAT. FLUID _____ DENSITY _____ LB/GAL. API

DISPL. FLUID _____ DENSITY _____ LB/GAL. API

PROP. TYPE _____ SIZE _____ LB.

PROP. TYPE _____ SIZE _____ LB.

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

ACID TYPE _____ GAL. _____ %

SURFACTANT TYPE _____ GAL. _____ IN

HE AGENT TYPE _____ GAL. _____ IN

FLUID LOSS ADD. TYPE _____ GAL.-LB. _____ IN

GELLING AGENT TYPE _____ GAL.-LB. _____ IN

FRIC. RED. AGENT TYPE _____ GAL.-LB. _____ IN

BREAKER TYPE _____ GAL.-LB. _____ IN

BLOCKING AGENT TYPE _____ GAL.-LB. _____

PERFPAC BALLS TYPE _____ QTY. _____

OTHER _____

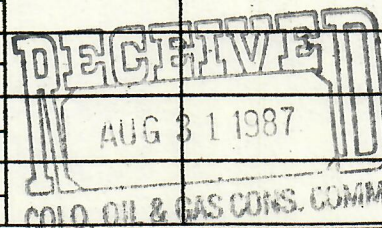
OTHER _____

JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>7-14-87</u>	DATE <u>7-15-87</u>	DATE <u>7-15-87</u>	DATE _____
TIME <u>0600</u>	TIME <u>0300</u>	TIME <u>0900</u>	TIME _____

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
<u>D. Lee</u>	<u>RCM</u>	<u>Vernal</u>
<u>R. FAIRCHILD</u>	<u>76125</u>	
<u>J. Mobley</u>	<u>RMAT</u>	
	<u>2528</u>	



DEPARTMENT Cement

DESCRIPTION OF JOB PTA AS instructed - set 4
35 SK plus w/ standard cmr - 1 plug
10% of same - see logs

JOB DONE THRU: TUBING ☒ CASING ☐ ANNULUS ☐ TEG./ANN. ☐

CUSTOMER REPRESENTATIVE X [Signature]

HALLIBURTON OPERATOR Dalton

COPIES REQUESTED _____

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIVES	YIELD CU.FT./SK.	MIXED LBS./GAL.
1	35	Standard			B	N/A	1.18	15.6
2	35				"	"	1.18	"
3	35				"	"	"	"
4	35				"	"	"	"
5	10				"	"	"	"

PRESSURES IN PSI

CIRCULATING _____ DISPLACEMENT _____

BREAKDOWN _____ MAXIMUM _____

AVERAGE _____ FRACTURE GRADIENT _____

SHUT-IN: INSTANT _____ 5-MIN. _____ 15-MIN. _____

HYDRAULIC HORSEPOWER

ORDERED _____ AVAILABLE _____ USED _____

AVERAGE RATES IN BPM _____

TREATING _____ DISPL. _____ OVERALL _____

CEMENT LEFT IN PIPE _____

FEET _____ REASON _____

SUMMARY

VOLUMES

PRESLUSH: SBL-GAL. See logs TYPE _____

LOAD & SKID: SBL-GAL. _____ PAD: SBL-GAL. _____

TREATMENT: SBL-GAL. _____ DISPL: SBL-GAL. See logs

CEMENT SLURRY: SBL-GAL. See logs

TOTAL VOLUME: SBL-GAL. _____

REMARKS

DISTRICT OKLAHOMA

AUG 31 1987

DATE 7-15-87

TO: HALLIBURTON SERVICES

YOU ARE HEREBY REQUESTED TO FURNISH EQUIPMENT AND SERVICEMEN TO DELIVER AND OPERATE

THE SAME AS AN INDEPENDENT CONTRACTOR TO: MALLEN OIL CO. (CUSTOMER)
AND DELIVER AND SELL PRODUCTS, SUPPLIES, AND MATERIALS FOR THE PURPOSE OF SERVICINGWELL NO. 18-6 LEASE MALLEN BEST IMAGE AVAILABLE SEC. 18 TWP. 7N RANGE 86W
FIELD Hayden COUNTY ROTT STATE OK OWNED BY Same

THE FOLLOWING INFORMATION WAS FURNISHED BY THE CUSTOMER OR HIS AGENT

FORMATION NAME	TYPE	NEW USED	WEIGHT	SIZE	FROM	TO	MAX. ALLOW. P.S.I.
FORMATION THICKNESS	FROM TO						
PACKER TYPE	SET AT						
TOTAL DEPTH	MUD WEIGHT						
BORE HOLE							
INITIAL PROD. OIL BPD, H ₂ O BPD, GAS MCF							
PRESENT PROD. OIL BPD, H ₂ O BPD, GAS MCF							
PERFORATIONS							
PERFORATIONS							
PERFORATIONS							

PREVIOUS TREATMENT: DATE TYPE MATERIALS

TREATMENT INSTRUCTIONS: TREAT THRU TUBING ☒ ANNULUS ☐ CASING ☐ TUBING/ANNULUS ☐ HYDRAULIC HORSEPOWER ORDEREDNew Equipment plus materials furnished to PTA well as instructed

CUSTOMER OR HIS AGENT WARRANTS THE WELL IS IN PROPER CONDITION TO RECEIVE THE PRODUCTS, SUPPLIES, MATERIALS, AND SERVICES

THIS CONTRACT MUST BE SIGNED BEFORE WORK IS COMMENCED

As consideration, the above-named Customer agrees:

- To pay Halliburton in accord with the rates and terms stated in Halliburton's current price lists.
- Halliburton shall not be responsible for and Customer shall secure Halliburton against any liability for damage to property of Customer and of the well owner (if different from Customer), unless caused by the willful misconduct or gross negligence of Halliburton, this provision applying to but not limited to subsurface damage and surface damage arising from subsurface damage.
- Customer shall be responsible for and secure Halliburton against any liability for reservoir loss or damage, or property damage resulting from subsurface pressure, losing control of the well and/or a well blowout, unless such loss or damage is caused by the willful misconduct or gross negligence of Halliburton.
- Customer shall be responsible for and secure Halliburton against any and all liability of whatsoever nature for damages as a result of subsurface trespass, or an action in the nature thereof, arising from a service operation performed by Halliburton hereunder.
- Customer shall be responsible for and secure Halliburton against any liability for injury to or death of persons, other than employees of Halliburton, or damage to property (including, but not limited to, injury to the well), or any damages whatsoever, irrespective of cause, growing out of or in any way connected with the use of radioactive material in the well hole, unless such damage shall be caused by the willful misconduct or gross negligence of Halliburton.
- Halliburton makes no guarantee of the effectiveness of the products, supplies or materials, nor of the results of any treatment or service.
- Customer shall, at its risk and expense, attempt to recover any Halliburton equipment, tools or instruments which are lost in the well and if such equipment, tools or instruments are not recovered, Customer shall pay Halliburton its replacement cost unless such loss is due to the sole negligence of Halliburton. If Halliburton equipment, tools or instruments are damaged in the well, Customer shall pay Halliburton the lesser of its replacement cost or the cost of repairs unless such damage is caused by the sole negligence of Halliburton. In the case of equipment, tools or instruments for marine operations, Customer shall, in addition to the foregoing, be fully responsible for loss of or damage to any of Halliburton's equipment, tools or instruments which occurs at any time after delivery to Customer at the landing until returned to the landing, unless such loss or damage is caused by the sole negligence of Halliburton.
- Because of the uncertainty of variable well conditions and the necessity of relying on facts and supporting services furnished by others, Halliburton is unable to guarantee the accuracy of any chart interpretation, research analysis, job recommendation or other data furnished by Halliburton. Halliburton personnel will use their best efforts in gathering such information and their best judgment in interpreting it, but Customer agrees that Halliburton shall not be responsible for any damages arising from the use of such information except where due to Halliburton's gross negligence or willful misconduct in the preparation or furnishing of it.
- Halliburton warrants only title to the products, supplies and materials and that the same are free from defects in workmanship and materials. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS OR OTHERWISE WHICH EXTEND BEYOND THOSE STATED IN THE IMMEDIATELY PRECEDING SENTENCE. Halliburton's liability and Customer's exclusive remedy in any cause of action (whether in contract, tort, breach of warranty or otherwise) arising out of the sale or use of any products, supplies or materials is expressly limited to the replacement of such products, supplies or materials on their return to Halliburton or, at Halliburton's option, to the allowance to the Customer of credit for the cost of such items. In no event shall Halliburton be liable for special, incidental, indirect, punitive or consequential damages.
- Invoices payable NET by the 20th of the following month after date of invoice. Upon Customer's default in payment of Customer's account by the last day of the month following the month in which the invoice is dated, Customer agrees to pay interest thereon after default at the highest lawful contract rate applicable but never to exceed 18% per annum. In the event it becomes necessary to employ an attorney to enforce collection of said account, Customer agrees to pay all collection costs and attorney fees in the amount of 20% of the amount of the unpaid account.
- This contract shall be governed by the law of the state where services are performed or equipment or materials are furnished.
- Halliburton shall not be bound by any changes or modifications in this contract, except where such change or modification is made in writing by a duly authorized executive officer of Halliburton.

I HAVE READ AND UNDERSTAND THIS CONTRACT AND REPRESENT
THAT I AM AUTHORIZED TO SIGN THE SAME AS CUSTOMER'S AGENT.SIGNED [Signature] CUSTOMERDATE 7-15-87TIME 2:02 A.M. P.M.

JOB LOG

CUSTOMER

MAILIN 18-6 Co.

PAGE NO.

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JOB TYPE

PTA

FORM 2013-R-2

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	X	TUBING	CASING	
#1	0800							Called out
	0800							on loc
	0805							Safety meeting - Rig up.
	0850							Pluc #1 Set @ 3498' TO 3598'
Pluc 1	0900	5	10			150		H2O ahead
(2)	0902	5	7 1/2			150		Mix i pump 35 SKS Std. Cmt @ 154
(3)	0905	6	48			100		Disp. Cmt
(4)	0911	—				0		Release psi - vacuum. Ric poth L.O. d/p
								* middle at Pluc #1 @ 3548' flowline
								Pluc #2 Set @ 3210' TO 3310'
Pluc 2	0935	5	10			150		H2O ahead
(6)	0937	5	7 1/2			150		Mix i pump 35 SKS Cmt AS ABOVE
(7)	0940	6	45			100		Disp. Cmt
(8)	0948	—				0		Release psi - vacuum Ric poth L.O. d/p
								* middle Pluc #2 @ 3260' - Carble
								Pluc #3 Set @ 1967' TO 2067'
Pluc 3	0952	5	10			100		H2O ahead
(10)	0954	5	7 1/2			100		Mix i pump 35 SKS Cmt AS ABOVE
(11)	0957	6	27			50		Disp. Cmt
(12)	0602	—				0		Release psi - vacuum Ric poth L.O. d/p
								Middle of Pluc 3 @ 2017' - Nubema
#2 cmt								Pluc #4 Set @ 270' TO 370'
Pluc 4	0721	5	10			50		H2O ahead
(2)	0723	5	7 1/2			50		Mix i pump 35 SKS Cmt AS ABOVE
(3)	0724	3	3			0		Disp. Cmt
(4)	0724	—				0		Release psi - vacuum Ric poth L.O. d/p
								Middle of Pluc @ 320' - shoe
								Pluc #5 Set @ 0' TO 10'
(5)	0857	1 1/2	10			0		H2O ahead
(6)	0903	1	2 1/2			0		Mix i pump 10 SKS Cmt AS ABOVE
(7)	0905	1/2	2 1/2			0		Disp. Cmt
(8)	0910							Release psi - vacuum Ric poth
	0930							End of Job
								THANK YOU D. J. J.

CUSTOMER