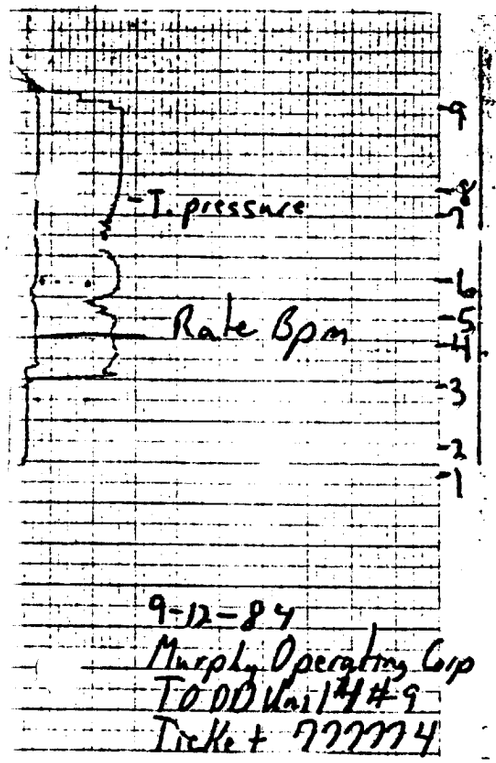

HALLIBURTON SERVICES
JOB LOG

FORM 2013 R-2

WELL NO. 9 LEASE TODD Unit #1 TICKET NO. 777774
CUSTOMER Murphy Operating Corp. PAGE NO. 1
JOB TYPE Acidize DATE 9-12-84

CHART NO.	TIME	RATE (BPM)	VOLUME (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
								Safety meeting
1	1442	4.3	250			20		Start Xylene
2	1443	4.5	1000			20		Start Acid
3	1446	4.0	785			560		Xylene on
4	1448	6.0	250			2400		Start Block Acid on Start xylene
5	1449	6.0	500			2510		Start Acid
6	1451	6.0	785			2520		Block on Start Second Block
7	1454	6.0	1250			2460		Start Flush
8	1459	6.0	785			2550		Second Block on
9	1500					800		Flush in ISIP
10	1501	-				0		
11								
12								
13								
14								
15								

Total Treatment - 92 BBls
Avrate - 6.0 Bpm Max Rate - 6.4 Bpm
Avpsi - 2400 psi Maxpsi - 2600 psi

HALLIBURTON SERVICES
FRACTURING SERVICE TREATING REPORT

FORM 2012 R-2

HALLIBURTON DIVISION Midland HALLIBURTON LOCATION Hobbs
BILLED ON TICKET NO. 777774

WELL DATA
Field Todd L. San Andres Sec. 31 Twp. 7S Rng. 38-E County Roosevelt State N. Mex
Formation Name L. San Andres Type Dolomite
Formation Thickness 40 From 4282 To 4322
Initial Prod: Oil ___ Bpd. Water ___ Bpd. Gas ___ Mcfd.
Present Prod: Oil ___ Bpd. Water ___ Bpd. Gas ___ Mcfd.
Isolation Tool # ___ Mandrel Size ___ Extensions ___ In.
Packer Type Guiberson V S Set At 4175
Bottom Hole Temp. ___ RBP# ___
Head Or Flange ___ Pbtd 4335

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	U	14	5 1/2	0	4335	
LINER						
TUBING	U	4.7	2 3/8	0	4175	
OPEN HOLE						SHOTS/FT.
PERFORATIONS				4282	4322	41
PERFORATIONS						
PERFORATIONS						

MATERIALS
Treat. Fluid ___ Density ___ Lb./Gal. API
Displ. Fluid ___ Density ___ Lb./Gal. API
Prop. Type ___ Size ___ Lb. ___
Prop. Type ___ Size ___ Lb. ___
Radioactive Tracer ___ Carrier ___ Units-MCi ___
Surfactant Type ___ Gal. ___ @ ___ /1000 Gal.
Surfactant Type ___ Gal. ___ @ ___ /1000 Gal.
Fluid Loss Type ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Gelling Agent ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Gelling Agent ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Breaker Type ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Breaker Type ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Crosslinker ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Stabilizer ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Buffer Type ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Buffer Type ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Bacteriacide ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Non-Foamer ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Clay Control ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Diverter ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Friction Reducer ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Perfpac Balls ___ Qty. ___ Size ___ S.G. ___
Other ___

JOB DATA

CALLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 9-12-84	DATE 9-12-84	DATE 9-12-84	DATE 9-12-84
TIME 1100	TIME 1300	TIME 1442	TIME 1500

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
B. Decker	Treater	Hobbs
F. Thornton	3197	
G. Pipal	3623	
J. Crawford	2004	
H. Woods	377	
J. Henderson	9181	

ACID DATA
Acid Type NEFE % 20 Gal./Bbl. 2000
Acid Type ___ % ___ Gal./Bbl. ___
Surfactant Type ___ Gal. ___ @ ___ /1000 Gal.
Surfactant Type ___ Gal. ___ @ ___ /1000 Gal.
NE Agent Type L. Solv Gal. 4 @ 2 /1000 Gal.
Clay Control Type ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Corrosion Inhibitor HAI-65 Gal.-Lb. 2 @ 1 /1000 Gal.
Corrosion Inhibitor ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Cracking Inhibitor ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Iron Sequester ___ Gal.-Lb. ___ @ ___ /1000 Gal.
Friction Reducer ___ Gal.-Lb. ___ @ ___ /1000 Gal.

DEPARTMENT Stimulation
DESCRIPTION OF JOB Acidize
JOB DONE THRU: TUBING ☑ CASING ☐ ANNULUS ☐ TBG./ANN. ☐

PRESSURES IN PSI
Circulating ___ Displacement ___
Breakdown ___ Maximum 2600
Average 2400 Fracture Gradient ___
ISIP 800 5 Min. ___ 10 Min. ___ 15 Min. ___

SUMMARY
HYDRAULIC HORSEPOWER
Ordered 500 Available 1000 Used 352
AVERAGE RATE IN BPM
Treating 6 Displ. 6 Overall 6

VOLUMES
Prefluish: Bbl.-Gal. ___ Type ___
Load & Bkdn: Bbl.-Gal. ___ Pad: Scf-Bbl.-Gal. ___
Treatment: Bbl.-Gal. 60 Displ: Bbl.-Gal. 32
Gas Assist ___ Tons-Scf ___ @ ___ Scf./Bbl.
Foam Quality ___ % Total Volume Foam ___ Bbl.-Gal.
Total Volume: Bbl.-Gal. 92 Fluid ___

REMARKS

Customer Representative X [signature]
Invoice Requested ___
Halliburton Operator [signature]

Customer: Murphy Operating Corp. Lease: Todd Unit #1 Well No.: 9 Job Type: Acidize Date: 9-12-84