

FRACTURING DIVISION

LOCATION

BILLED ON
TICKET NO.

473778

FORM 0012 5-1

00200524

Field WINTERBERRY Sec. 77 Twp. 6N Rng. 14W County WELL State COLORADO

Formation Name COAL - MESA Type SAND

Formation Thickness 571' From 6579 To 6870

Initial Prod: Oil _____ Bpd. Water _____ Bpd. Gas _____ Mcfd.

Present Prod: Oil _____ Bpd. Water _____ Bpd. Gas _____ Mcfd.

Isolation Tool # _____ Mandrel Size _____ Extensions _____ in.

Packer Type _____ Set At _____

Bottom Hole Temp. _____ RBP# _____

Head Or Flange _____ Ptd 6928

	NEW USED	WEIGHT	SIZE	FROM	TO	MAXIMUM PSI ALLOWABLE
CASING	N	9.2	3 1/2	0	6928	7000
LINER						
TUBING						
OPEN HOLE						SHOTS/IN.
PERFORATIONS	N/A	14"	6579	6589	3"	
PERFORATIONS	B	14"	6682	6702	6"	
PERFORATIONS	C.H.I.	14"	6763	6820	5"	

MATERIALS

Treat. Fluid LGC IV Density 90/35 Lb./Gal. 2 API

Displ. Fluid CLAY-FIX II + WATER Density 21.000 Lb./Gal. 2 API

Prop. Type BULK SAND Size 100 MESH Lb. 15000

Prop. Type BULK SAND Size 20/40 Lb. 20000

Radioactive Tracer _____ Carrier _____ Units-MCI _____

Surfactant Type LOSURF-259 Gal. 43 @ 1 /1000 Gal.

Surfactant Type _____ Gal. _____ @ _____ /1000 Gal.

Fluid Loss Type _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Gelling Agent LGC IV Gal.-Lb. 890 @ 90/35 /1000 Gal.

Gelling Agent _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Breaker Type G-33-3 Gal.-Lb. 5 @ 1000 /1000 Gal.

Breaker Type SP Gal.-Lb. 10 @ 1000 /1000 Gal.

Crosslinker CL-18 Gal.-Lb. 52 @ 6/5 /1000 Gal.

Stabilizer GEL-STA Gal.-Lb. 200 @ 5 /1000 Gal.

Buffer Type BA-40 Gal.-Lb. 300 @ 3 /1000 Gal.

Buffer Type _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Bactericide BZ-A Gal.-Lb. 30 @ .25 /1000 Gal.

Non-Foamer _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Clay Control CLAY-FIX II Gal.-Lb. 200 @ 2 /1000 Gal.

Diverter _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Friction Reducer _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Perfpac Balls _____ Qty. _____ Size _____ S.G. _____

Other _____

JOB DATA

CALLER OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE <u>4-16-90</u>	DATE <u>4-26-90</u>	DATE <u>4-26-90</u>	DATE <u>4-26-90</u>
TIME <u>0730</u>	TIME <u>0730</u>	TIME <u>0844</u>	TIME <u>1034</u>

PERSONNEL AND SERVICE UNITS

NAME	UNIT NO. & TYPE	LOCATION
D. LANNING	6401	51321 G. L.
R.J. RAFFERTY	50411	251416 COB
D. MAUSOLF	13171	76751 BLEND
L. CORDRY	80813	5603 PER
A. LAUSCH	40939	5350 MINZ
T. VONFELDT	01702	75306 HT
J. HAIL	D9576	7882 HT
R. RAMMINGS	D9686	5851 HT
J. CAINE	24627	5893 HT
R. SUGLEY	07772	7013 HT
P. WILLIAMS	9640	0176 12A
G. GORDON	01507	7221 MAT
S. GARNER	51112	5763 Bld
J. BRADY	D9235	5153 Bld
G. STARNETT	07112	1575 Bld

ACID DATA

Acid Type 7 1/2 % HCL Gal.-Bbl. 500

Acid Type _____ % _____ Gal.-Bbl. _____

Surfactant Type LOSURF-259 Gal. 1 @ 2 /1000 Gal.

Surfactant Type _____ Gal. _____ @ _____ /1000 Gal.

NE Agent Type _____ Gal. _____ @ _____ /1000 Gal.

Clay Control Type CLAY-FIX II Gal.-Lb. 1 @ 2 /1000 Gal.

Corrosion Inhibitor HAI-XS Gal.-Lb. 2 @ 4 /1000 Gal.

Corrosion Inhibitor _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Cracking Inhibitor _____ Gal.-Lb. _____ @ _____ /1000 Gal.

Iron Sequester FERCHECK II Gal.-Lb. 5 @ 10 /1000 Gal.

Friction Reducer _____ Gal.-Lb. _____ @ _____ /1000 Gal.

PRESSURES IN PSI

Circulating _____ Displacement 6100

Breakdown 4800 Maximum 6800

Average 5850 Fracture Gradient _____

ISIP 3500 5 Min. 3400 10 Min. 3290 15 Min. 3250

Ordered 5000 Available 5000 Used 4518

AVERAGE RATE IN BPM

Treating 28-32 Displ. 32-11 Overall 32

SUMMARY

VOLUMES

Preflush: Bbl.-Gal. 500 7 1/2 HCL ACID Type _____

Load & Bkdn: Bbl.-Gal. _____ Pad: Scf-Bbl.-Gal. 15000

Treatment: Bbl.-Gal. 80840 Displ.: Bbl.-Gal. 2410

Gas Assist _____ Tons-Scf _____ Scf./Bbl. _____

Foam Quality _____ % Total Volume Foam _____ Bbl.-Gal. _____

Total Volume: Bbl.-Gal. 4850 Fluid-Foam _____

REMARKS

2340 17 PERF. & WATER

17 BULK & ACID

Halliburton Operator _____

CUSTOMER

CUSTOMER

RESOURCES

HALLIBURTON

HOMER

WELL NO.

15-27

JOB TYPE

MUT-TEAC HT

DATE

4-26-90

JOB LOG

 WELL NO. 15-27 LEASE HUNTERD TICKET NO. 405110
 CUSTOMER CANNON RESOURCES 1 PAGE NO. 1
 JOB TYPE 114-T-FINAL HT SERVICE DATE 4-26-90

FORM 2015B-2

CHART NO.	TIME	RATE (BPM)	VOLUME (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0430							CALLED OUT
	0730							ON LOCATION
	0900							SAFETY MEETING
	0815							PRIME UP + TEST LINES TO 6000 PSI
	0844	6	500	2		4500		SPEARHEAD 500 gals 7½% HCL ACID
1	0848	28.3	15000	10		6200		START PAD
2	0903	29	5000	10		5800		START 100 MESH SAND @ 1#/gal
3	0908	28.5	5000	10		5640		START 100 MESH SAND @ 2#/gal
	0910			10		5880		2" HIT
4	0912	28.5	8000	10		5880		START 20/40 @ 2"
	0914			10		5750		2" 20/40 HIT
5	0919	30	12000	10		5750		START 3" 20/40 SAND
	0921			10		5770		3" HIT
6	0930	30	12000	10		5630		START 4" 20/40 SAND
	0932			10		5850		4" HIT
7	0940	32	20000	10		5880		START 5" 20/40
	0942			10		5900		5" HIT
8	0958	32	18840	10		5830		START 6" 20/40
	1001			10		5830		6" HIT
9	1017	32	2410	10		6000		START FLUSH
	1019					3500		15IP
	1024					3400		5 MIN
	1029					3290		10 MIN
	1034					3250		15 MIN
								THANK YOU PAUL

CUSTOMER