

HALLIBURTON
SERVICE

A Division of Halliburton Company
DUNCAN, OKLAHOMA 73533

Fracometer Log

TICKET NO. 025225

Company Vassolo Oil & Gas Date 9-9-76

Lease Wagner Well No. A-2 State Calo

County Weld Formation Sussex

Type Job SuperEmulsion

Fracturing Fluid: Type Gelled Water Volume: 126,000 Gals

Propping Agent: Size 10/20 Quantity: 186,000 Lbs.

Propping Agent: Size 20/40 Quantity: 40,000 Lbs.

Halliburton Operator: J. Proper

Instrument No.: 5000 psi

REMARKS: 50 bpm

3/16" / Min

Denver

JOB SUMMARY

HALLIBURTON
LOCATION

Brighton

FILED ON
TICKET NO

Q. 225

FORM ~~2025~~ 2025

WELL DATA

WELL DATA				Weld				State	
FIELD		SEC.	TWP.	RNG.	COUNTY		STATE		Colo
Spindle		34	1 N	67W					
FORMATION NAME		Sussex	TYPE		Sand				
FORMATION THICKNESS		FROM	TO						
INITIAL PROD. OIL	SPD. WATER	SPD. GAS	MCFD						
PRESENT PROD. OIL	SPD. WATER	SPD. GAS	MCFD						
COMPLETION DATE		MUD TYPE		MUD WT.					
PACKER TYPE		SET AT							
BOTTOM HOLE TEMP.		PRESSURE							
MISC. DATA									

	NEW USED	SIZE	FROM	TO	WEIGHT	MAXIMUM PSI ALLOWABLE
CASING	U	5 1/2	0	5035	15.5	
LINER						
TUBING	U	2 7/8	0	4840	6.5	
DREN HOLE					TOTAL DEPTH: 5035	
PERFORATIONS					SHOTS/FT.	
PERFORATIONS					SHOTS/FT.	
PERFORATIONS					SHOTS/FT.	

JOB DATA

TOOLS AND ACCESSORIES		
TYPE AND SIZE	QTY.	MAKE
FLOAT COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER		
OTHER		

MATERIALS

TREAT. FLUID	DENSITY	LB/GAL.	API
DISPL. FLUID	DENSITY	LB/GAL.	API
PROP. TYPE	SIZE	LB.	
PROP. TYPE	SIZE	LB.	
ACID TYPE	MCA	250	% 7 1/2
ACID TYPE	H.P. (Reg)	750	%
ACID TYPE	Morflo	8	% 1000
SURFACTANT TYPE			
HE AGENT TYPE	HAI850	7	IN 1000
FLUID LOSS ADD. TYPE		GAL. LB	IN
GELLING AGENT TYPE		GAL. LB	IN
FRIC. RED. AGENT TYPE	Morflo	39	IN Oil
BREAKER TYPE		GAL. LB	IN
BLOCKING AGENT TYPE		GAL. LB	
PERFPAC BALLS TYPE	RCN 1.1		QTY. 30
OTHER			
OTHER			

PERSONNEL AND SERVICE UNITS

[illegible]

DEPARTMENT Cement

DESCRIPTION OF JOB Treat Well with Acid

JOB DONE THRU: TUBING ☒ CASING ☐ ANNULUS ☐ TBG/JANN. ☐

CUSTOMER REPRESENTATIVE X

HALLIBURTON OPERATOR R. Adams COPIES REQUESTED _____

CEMENT DATA

[illegible]

SUMMARY

PRESSURES IN PSI		VOLUMES	
CIRCULATING _____	DISPLACEMENT _____	2500	
BREAKDOWN _____	MAXIMUM _____	2500	
AVERAGE _____	FRACTURE GRADIENT _____		
850	750		
SHUT-IN INSTANT _____	5-MIN. _____	15-MIN. _____	
HYDRAULIC HORSEPOWER			
ORDERED _____	AVAILABLE _____	USED _____	
AVERAGE RATES IN BPM			
TREATING _____	DISPL. _____	OVERALL _____	
3	8 1/2	5 1/2	
CEMENT LEFT IN PIPE			
FEET _____	REASON _____		

PREFLUSH: EBL: GAL _____	1000	TYPE _____	Oil & Morflo
LOAD & BKON: EBL: GAL _____		PAD: EBL: GAL _____	1000
TREATMENT: EBL: GAL _____	1000	DISPL: EBL: GAL _____	1200
CEMENT SLURRY: EBL: GAL _____	4700		
TOTAL VOLUME: EBL: GAL _____		REMARKS _____	

CUSTOMER Wessels Oil & Gas LEASE Wagner WELL NO. A-2 JOB TYPE Chemical Service DATE 9-9-76

PAGE NO.

DATE 2007-07-27

CUSTOMER

JOB SUMMARY

FORM 1000 2025

HALLIBURTON

HALLIBURTON
LOCATION

Denver

Brighton

BILLED ON
TICKET NO. 025225

WELL DATA

FIELD	Spindle	SEC.	34	TWP.	1 N	RNG.	67W	COUNTY	Weld	STATE	Colo
FORMATION NAME	Sussex	TYPE	Shale								
FORMATION THICKNESS	52'	FROM		TO							
INITIAL PROD. OIL		BPD. WATER		BPD. GAS							
PRESENT PROD. OIL		BPD. WATER		BPD. GAS							
COMPLETION DATE	New	MUD TYPE		MUD WT.							
PACKER TYPE		SET AT									
BOTTOM HOLE TEMP.		PRESSURE									
MISC. DATA											

NEW USED	SIZE	FT. CM	TO	WEIGHT	MAXIMUM PSI ALLOWABLE
CASING	U	5 1/2	0	5035	15.5
LINER					
TUBING					
OPEN HOLE				TOTAL DEPTH:	5035
PERFORATIONS		4874	4880	2	SHOTS/FT.
PERFORATIONS		4886	4983	2	SHOTS/FT.
PERFORATIONS		4914	4926	2	SHOTS/FT.

TOOLS AND ACCESSORIES

TYPE AND SIZE	QTY.	MAKE
FLOAT-COLLAR		
FLOAT SHOE		
GUIDE SHOE		
CENTRALIZERS		
BOTTOM PLUG		
TOP PLUG		
HEAD		
PACKER	1	Baker
OTHER		

MATERIALS

TREAT. FLUID	Super E	DENSITY		LB/GAL. API
DISPL. FLUID	Gelled Water	DENSITY		LB/GAL. API
PROP. TYPE	Sand	SIZE	10/20	LB. 185,000
PROP. TYPE	Sand	SIZE	20/40	LB. 40,000
ACID TYPE		GAL.		%
ACID TYPE		GAL.		%
ACID TYPE		GAL.		%
SURFACTANT TYPE	SEM-6	GAL.	165	IN
WE AGENT TYPE		GAL.		IN
FLUID LOSS ADD. TYPE		GAL. LB		IN
GELLING AGENT TYPE	WG-6	GAL. LB	1900	IN
FRIC. RED. AGENT TYPE		GAL. LB		IN
BREAKER TYPE		GAL. LB		IN
BLOCKING AGENT TYPE	BE-2 1 gal/1000	GAL. LB		62
PERFORAC BALLS TYPE	RON 1.3 7/8"	QTY.	25	
OTHER	KOL-7000 #, CW-1 - 450#, GSW-40# 1#/1000			
OTHER	HyFlow III - 10 gal., AS-5 - 10 gal.			

JOB DATA

CALLLED OUT	ON LOCATION	JOB STARTED	JOB COMPLETED
DATE 9-10-76	DATE 9-10-76	DATE 9-10-76	DATE 9-10-76
TIME 0800	TIME 0930	TIME 1245	TIME 1456

PERSONNEL AND SERVICE UNITS

NAME	EMPL. NO.	UNIT NO. & TYPE	LOCATION
J. Proper		Opr.	Brighton
J. Hart		8350 HT	"
B. McCombie		9926-4191HT	"
D. Willoughby		0186 Iron	"
K. Wright		9994 Mat	"
R. Rafferty		0184 Prod	"
S. Smith		7484 Hose	"
D. Horning		0187 Fire	"
R. Miller		10014-4294	"
B. Miller		9732-4293 Sand "	"
L. Enos		8351-4426 Sand "	"
M. Atwood		9658 Sand "	"
J. Shedd		9335 Sand "	"
C. Smith		HTD. Sup	"

DEPARTMENT	Cement
DESCRIPTION OF JOB	SuperEmulsifrac

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

CUSTOMER REPRESENTATIVE X

HALLIBURTON OPERATOR COPIES REQUESTED

CEMENT DATA

STAGE	NUMBER OF SACKS	TYPE	API CLASS	BRAND	BULK SACKED	ADDITIONS	YIELD CU. FT./SK.	MIXED LBS./GAL.

SUMMARY

PRESSURES IN PSI				VOLUMES			
CIRCULATING	DISPLACEMENT	1300		PREFLUSH: BBL. GAL.	TYPE		
BREAKDOWN	2800	MAXIMUM	1850	LOAD & SKIN: BBL. GAL.	PAD: BBL. GAL.	15,000	
AVERAGE	1450	FRACATURE GRADIENT		TREATMENT: BBL. GAL.	DISPL: BBL. GAL.	7,000	
SHUT-IN: INSTANT	950	3 MIN.	900	CEMENT SLURRY: BBL. GAL.			
		15 MIN.	870	TOTAL VOLUME: BBL. GAL.	126,000		
ORDERED	889	AVAILABLE	2000	REMARKS			
		USED	839	1950 bbls Oil Used			
AVERAGE RATES IN BPM				1030 bbls Water Used			
TREATING	25	DISPL	25	166 For Flush			
CEMENT LEFT IN PIPE							
FEET	REASON						

CUSTOMER Vessels Oil & Gas

LEASE Warner

WELL NO.

A-2

JOB TYPE

SuperEmulsifrac

DATE

9-10-76

CHART NO.	TIME	RATE (GPM)	VOLUME (BBL) (GAL)	PUMPS		PRESSURE (PSI)		DESCRIPTION OF OPERATION AND MATERIALS
				T	C	TUBING	CASING	
	0800							Time Frac Crew Called Out
	0930							Time Frac Crew on Location
	1245							Time Requested Ready
	1245							Time Halliburton Ready
	1230							Safety Meeting
1	1245	18		4		-		Load Hole
2	1250	-	8000	1		4700		Test Lines
3	1252	2		1		2800		Breakdown
4	1257	25	10000	4		1400		Start 20/40 at 2#
5	1302	25		4		1270		2# 20/40 HIT
6	1307	25	35000	4		1260		Start 10/20 at 2#
7	1312	25		4		1300		2# 10/20 HIT
8	1342	25	5000	4		1520		Start 10/20 at 3#
9	1343	25		4		1480		3# 10/20 HIT
10	1348	25	2000	4		1470		Start 10/20 at 4#
11	1351	22	7000	4		1300		Start Spacer & Drop Balls
12	1353	25		4		1540		4# 10/20 HIT
13	1355	25		4		1700		Balls HIT
14	1356	25	10000	4		1690		Start 20/40 at 2#
15	1402	25		4		1420		2# 20/40 HIT
16	1406	25	35000	4		1370		Start 10/20 at 2#
17	1411	25		4		1470		2# 10/20 HIT
18	1442	25	5000	4		1850		Start 10/20 at 3#
19	1447	25		4		1750		3# 10/20 HIT
20	1448	25	2000	4		1750		Start 10/20 at 4#
21	1449	25		4		1720		End Treatment
22	1452	25		4		1620		4# 10/20 HIT
23	1456	25		4		1300		Flush
						950		ISIP

RETAIN