

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

(See other instructions on reverse side)

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

5. LEASE DESIGNATION AND SERIAL NO.

14-20-603-2199

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo Nation

7. UNIT AGREEMENT NAME

NW Cha Cha Unit

8. FARM OR LEASE NAME, WELL NO.

NW Cha Cha Unit #25

9. API WELL NO.

30-045-29163

10. FIELD AND POOL, OR WILDCAT

Cha Cha Gallup

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 22, T29N, R14W

NMPM

12. COUNTY OR PARISH

San Juan

13. STATE

NM

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ Other ☐ 94 NOV 14 PM 2

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEPEN ☐ PLUG BACK ☐ DIFF. REMVR. ☐ Other ☐ CTO EXAMINATION

2. NAME OF OPERATOR Sirgo Brothers Energy Corp Agent for Mountain States Petroleum Corp.

3. ADDRESS AND TELEPHONE NO.

P O Box 3531, Midland TX 79702 915/685-0878

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*

At surface 2431' FSL & 1889' FWL Unit K

At top prod. interval reported below

At total depth Same

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

9-10-94

16. DATE T.D. REACHED

9-16-94

17. DATE COMPL. (Ready to prod.)

11-4-94

18. ELEVATIONS (OF, RKB, RT, OR, ETC.)*

5574' GL

19. ELEV. CASINGHEAD

5584' KB

20. TOTAL DEPTH, MD & TVD

5320'

21. PLUG BACK T.D., MD & TVD

5289'

22. IF MULTIPLE COMPL., HOW MANY*

none

23. INTERVALS DRILLED BY

ROTARY TOOLS

X

CABLE TOOLS

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

Cha Cha Gallup 5129-5228'

25. WAS DIRECTIONAL SURVEY MADE

no

26. TYPE ELECTRIC AND OTHER LOGS RUN

GR Neutron

27. WAS WELL CORDED

no

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
8-5/8"J55	24#	238'	12-1/4"	Surface 145 sx	
5-1/2"J55	15.5#	5320'	7-7/8"	Surface 550 sx	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-7/8"	5244'	

31. PERFORATION RECORD (Interval, size and number)

Gallup 5129-5228' 3 SPF 126 holes
0.5"

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5129-5228'	A 1000 gals. 15% acid + 175 b.s.
	F 35,000 gals + N2 foam +
	175,250# 20/40 sd

33. PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
11-4-94		Pumping				Producing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
11-4-94	24		→	200	173	38	865
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
		→	200	173	38	40	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Used for fuel

TEST WITNESSED BY

M.A. Sirgo III

35. LIST OF ATTACHMENTS

None

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE Agent

DATE 11-9-94

*(See Instructions and Spaces for Additional Data on Reverse Side)

WELL NAME AND NUMBER NW Cha Cha No. 25

LOCATION 2431' FSL & 1889' FWL Unit K Sec. 22, T29N, R14W, NMPM, San Juan, NM

OPERATOR Sirgo Brothers Energy Corporation Agent for Mountain States Pet Corp

DRILLING CONTRACTOR United Drilling, Inc.

The undersigned hereby certifies that he is an authorized representative of the drilling contractor who drilled the above described well and had conducted deviation tests and obtained the following results:

<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>	<u>Degrees @ Depth</u>
<u>1/2° 507'</u>	<u>3/4° 4526'</u>	<u> </u>
<u>3/4° 1024'</u>	<u>1/2° 5024'</u>	<u> </u>
<u>1/4° 1518'</u>	<u> </u>	<u> </u>
<u>1/2° 2016'</u>	<u> </u>	<u> </u>
<u>1° 2509'</u>	<u> </u>	<u> </u>
<u>1° 3006'</u>	<u> </u>	<u> </u>
<u>1-1/4° 3502'</u>	<u> </u>	<u> </u>
<u>3/4° 3999'</u>	<u> </u>	<u> </u>

Drilling Contractor United Drilling, Inc.

By: *C. M. Gibbs*

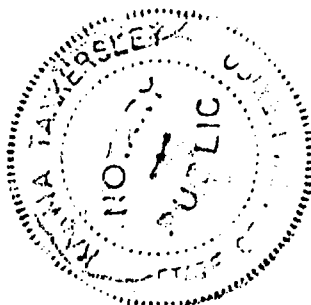
Title: Business Manager

Subscribed and sworn to before me this 19th day of September, 1994.

Karna Tankersley
Notary Public

My Commission Expires: 9-25-94

Chaves M. M.
County State



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
BLM

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

94 OCT 25 PM 1:02

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals.

SUBMIT IN TRIPLICATE

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator Sirgo Brothers Energy Corp Agent for
Mountain States Petroleum Corp.

3. Address and Telephone No.
P O Box 3531, Midland, TX 79702 915/685-0878

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2431' FSL & 1889' FWL Unit K
Sec. 22, T29N, R14W NMPM

5. Lease Designation and Serial No.
14-20-603-2199

6. If Indian, Allottee or Tribe Name
Navajo Nation

7. If Unit or CA, Agreement Designation
NW Cha Cha Unit

8. Well Name and No.
NW Cha Cha Unit #25

9. API Well No.
30-045-29163

10. Field and Pool, or Exploratory Area
Cha Cha Gallup

11. County or Parish, State
San Juan, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other Spud & Run Casing	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

1. MI&RU United Drilling. Spud well at 10:30 p.m. 9-10-94.
2. Drilled to 243'. Set 6 jts. 8-5/8" OD 24# J55 casing at 238'. Cemented w/145 sx Class B cement w/2% CaCl. Yield 1.18 cu. ft. Circulated 8 bbls. cement to surface.
3. WOC 18 hrs. Tested casing to 1000# for 30 min., held okay.
4. Drilled to 5320' TD 9-16-94.
5. Set 150 jts. 5-1/2" OD casing at 5320'. Cemented w/450 sx 65/35/12% gel + 1/4#/sx, weight 11.8 ppg, yield 2.36 cu. ft. + 100 sx B + 1/4#/sx Celloseal weight 15.6 ppg, yield 1.18 cu. ft. Cement circulated to surface. WOC.
6. Waiting on completion unit.

14. I hereby certify that the foregoing is true and correct

Signed [Signature] Title Agent Date 10-21-94

space for Federal or State office use)

Approved by
Conditions of approval, if any:

Title

ACCEPTED FOR RECORD

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1. TYPE OF WORK
DRILL ☒ DEEPEN ☐

2. TYPE OF WELL
OIL ☒ GAS ☐ OTHER ☐ SINGLE ZONE ☒ MULTIPLE ZONE ☐

3. NAME OF OPERATOR
SIRGO BROTHERS ENERGY CORP. AS AGENT
FOR MOUNTAIN STATES PETROLEUM CORP.

4. ADDRESS AND TELEPHONE NO.
P. O. BOX 3531, MIDLAND, TX 79702 (915) 685-0878

5. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)
At surface 2431' FSL & 1889' FWL Unit K
Sec. 22, T29N, R14W, NMPM
At proposed prod. zone
Same

6. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
5 MILES SOUTHWEST OF FARMINGTON

5. LEASE DESIGNATION AND SERIAL NO.
14-20-603-2199

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
NAVAJO NATION

7. UNIT AGREEMENT NAME
N.W. CHA CHA UNIT

8. FARM OR LEASE NAME, WELL NO.
N.W. CHA CHA UNIT #25

9. API WELL NO.

10. FIELD AND POOL, OR WILDCAT
CHA CHA (GALLUP)

11. SEC., T., R., M., OR BLK.
AND SURVEY OR AREA
Sec. 22, T29N,
R14W, NMPM

12. COUNTY OR PARISH
SAN JUAN

13. STATE
NM

14. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST 4223' from unit
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any) boundary

15. DISTANCE FROM PROPOSED LOCATION* 1810' from
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT. Well #16

16. NO. OF ACRES IN LEASE
1632

17. NO. OF ACRES ASSIGNED
TO THIS WELL
80

18. PROPOSED DEPTH
5330'

19. ROTARY OR CABLE TOOLS
Rotary

20. ELEVATIONS (Show whether DF, RT, GR, ~~etc.~~)
5574' GR

21. APPROX. DATE WORK WILL START*
March 20, 1994

22. APPROX. DATE WORK WILL START*
March 20, 1994

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	J-55, 8-5/8"	24#	210'	165 sacks
7-7/8"	J-55, 5-1/2"	15.5#	5330'	860 sacks

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS"

1. Circulate cement to surface on 8-5/8" surface pipe.

2. Will two stage 5-1/2" casing to circulate cement back to surface pipe.

3. BOP Diagram attached.

RECEIVED
BLM
54 MAR -8 AM 10:03
070 FARMINGTON, NM

4. ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED M. A. Sirgo, III TITLE President DATE Feb. 17, 1994

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
CONDITIONS OF APPROVAL, IF ANY:

OPERATOR

APPROVED BY _____ TITLE _____

*See Instructions On Reverse Side

APPROVED
AS AMENDED

AUG 18 1994

DISTRICT MANAGER

SIRGO BROTHERS ENERGY CORP.

NORTH WEST CHA CHA #25

CHA CHA FIELD

SAN JUAN COUNTY, NM

GALLUP A & B FORMATION



The Western Company

30 BPM -5 1/2",20/40 OTTAWA

PREPARED FOR

**MR. MANNY SIRGO
OWNER**

MR. SAM BILLINGTON

**SERVICE POINT
FARMINGTON, NM
(505) 327-6222**

**PREPARED BY
MIKE MCNEESE
TECH REP II
FARMINGTON**

OCTOBER 21, 1994

FM040130

**SALES REPRESENTATIVE
MIKE MCNEESE
TECH REP II**

THE WESTERN COMPANY

OPERATOR: SIRGO BROTHERS ENERGY CORP.
WELL: NORTH WEST CHA CHA #25
FORMATION: GALLUP A & B

WELL DATA

Net Pay	38 ft
Depth to Middle Perforation	5,148 ft
Reservoir Pressure	2,250 psi
Permeability	4 md
Porosity	15 percent
Casing	5 1/2", 15.5#, J-55
Gross Fracture Height	100 ft
Net Fracture Height	45 ft
Fracture Gradient	.65 psi/ft
Bottom Hole Frac Pressure	3,346 psi
Bottom Hole Temperature	130 deg F
Perforated Interval	5126'-5138'
	5144'-5170'
	TOTAL OF 38 HOLES @
	0.50"
	PERFS MAY CHANGE

THE WESTERN COMPANY**Treatment Requirements for: 30 BPM-20/40 SAND**

**ACETIC SPOT: 250 GALLONS 15% ACETIC/10% MEOH PUMPED VOLUME
 225 GALLONS TO BE MIXED**

Containing per 1000 Gallons:

2.00 Gallons I-8A, CORROSION INHIBITOR
5.00 Gallons CITRIC ACID LIQUID, IRON CONTROL
0.50 Gallons CLAY MASTER-5, CLAY CONTROL
1.00 Gallons NINE-40, SURFACTANT

MIX 225 GAL 15% ACETIC ACID W/ 25 GAL MEOH & THE ABOVE ADDITIVES.
SPOT ACID ACROSS THE INTERVAL TO BE PERFORATED.

**ACID BALL-OFF: 1,000 GALLONS 15% ACETIC/10% MEOH PUMPED VOLUME
 900 GALLONS TO BE MIXED**

Containing per 1000 Gallons:

2.00 Gallons I-8A, CORROSION INHIBITOR
5.00 Gallons CITRIC ACID LIQUID, IRON CONTROL
0.50 Gallons CLAY MASTER-5, CLAY CONTROL
1.00 Gallons NINE-40, SURFACTANT

MIX 900 GAL 15% ACETIC ACID W/ 100 GAL MEOH & THE ABOVE ADDITIVES
RUN 55 GAL OF TECHNI-HIB 756 (SCALE CONTROL) IN FLUSH. 76 BALLS

PRE-PAD: 5,000 GALLONS 2% KCL/TECHNI-SOLV

Containing per 1000 Gallons:

11.00 Gallons TECNI-SOLV 155, PARIFFIN INHIBITOR
0.38 Pounds FRAC-CIDE 20, BACTERIACIDE

RUN 55 GALLONS OF TECHNI-SOLV 155 WITH 5,000 GAL OF 2% KCL WATER.
THIS TANK USED FOR BREAKDOWN, ACID AND THIS PRE-PAD.

continued.....

THE WESTERN COMPANY**Treatment Requirements (continued)**

PAD - 3 PPG: 57,000 GALLONS 65Q N2/VKG ID-30

Pumped Volumes:

19,950 Gallons 30# J-4

Mixed Volumes:

21,950 Gallons 30# J-4

Containing per 1000 Gallons:

0.38 Pounds FRAC-CIDE 20, BACTERIACIDE
30.00 Pounds J-4, GELLING AGENT
1.00 Gallons NINE-40, SURFACTANT
2.00 Gallons B-31, GEL BREAKER CATALYST/BUFFER
2.00 Pounds B-5, GEL BREAKER
1.00 Pounds ULTRA PERM BREAKER, C.R.B.
5.00 Gallons FRAC-FOAM 1, FOAMING AGENT
0.75 Gallons CL-30, CROSSLINKER
0.40 Gallons CL-2L, CROSSLINKER

THE ABOVE VOL INCLUDES 1,000 GAL FOR TANK BOTTOMS-2. CHECK THE X-LINKER/BREAKER LOADINGS PRIOR TO THE JOB. THIS TESTED @ 125 F

3 PPG - 4 PPG: 13,000 GALLONS 65Q N2/VKG ID-30

Pumped Volumes:

4,549 Gallons 30# J-4

Mixed Volumes:

4,549 Gallons 30# J-4

Containing per 1000 Gallons:

0.38 Pounds FRAC-CIDE 20, BACTERIACIDE
30.00 Pounds J-4, GELLING AGENT
1.00 Gallons NINE-40, SURFACTANT
2.00 Gallons B-31, GEL BREAKER CATALYST/BUFFER
3.00 Pounds B-5, GEL BREAKER
1.00 Pounds ULTRA PERM BREAKER, C.R.B.
5.00 Gallons FRAC-FOAM 1, FOAMING AGENT
0.75 Gallons CL-30, CROSSLINKER
0.40 Gallons CL-2L, CROSSLINKER

BREAK THIS STAGE AT 115 DEG F IN TWO HOURS.

continued.....

THE WESTERN COMPANY**Treatment Requirements (continued)****4 PPG - 5 PPG: 14,778 GALLONS 65Q N2 FOAM 30***Pumped Volumes:*

5,174 Gallons 30# J-4

Mixed Volumes:

5,174 Gallons 30# J-4

Containing per 1000 Gallons:

0.38 Pounds FRAC-CIDE 20, BACTERIACIDE
30.00 Pounds J-4, GELLING AGENT
1.00 Gallons NINE-40, SURFACTANT
2.00 Gallons B-31, GEL BREAKER CATALYST/BUFFER
2.00 Pounds B-5, GEL BREAKER
1.00 Pounds ULTRA PERM BREAKER, C.R.B.
5.00 Gallons FRAC-FOAM 1, FOAMING AGENT

BEGIN 30# LINEAR/65 Q FOAM FROM 4 PPG TO 5 PPG RAMP.
BREAK THIS STAGE IN TWO HOURS AT 115 DEG F.

FLUSH: 5,000 GALLONS 60Q N2 FOAM 30*Pumped Volumes:*

1,999 Gallons 30# J-4

Mixed Volumes:

1,999 Gallons 30# J-4

Containing per 1000 Gallons:

0.38 Pounds FRAC-CIDE 20, BACTERIACIDE
30.00 Pounds J-4, GELLING AGENT
1.00 Gallons NINE-40, SURFACTANT
2.00 Gallons B-31, GEL BREAKER CATALYST/BUFFER
2.00 Pounds B-5, GEL BREAKER
1.00 Pounds ULTRA PERM BREAKER, C.R.B.
5.00 Gallons FRAC-FOAM 1, FOAMING AGENT

ADDITIONAL MATERIALS:

55.00 Gallons TECHNI-HIB 756
125.00 Gallons METHANOL, MEOH
55.00 Gallons TECHNI-SOLV 155

PROPPANTS: 175,000 Pounds 20/40 MESH OTTAWA

NORTH WEST CHA CHA #25 FRACTURE PROCEDURE

1. PUMP 5,000 GALLONS OF 2% KCL WATER WITH 55 GALLONS OF TECHNI-SOLV 155 AT 11 BPM AS PRE-PAD.
2. PUMP 20,000 GALLONS OF 65 Q N2/VIKING ID-30 AT 30 BPM AS PAD.
3. PUMP 10,000 GALLONS OF 65 Q N2/VIKING ID-30 AT 30 BPM WITH SAND RAMPED FROM 1/2 PPG TO 1 PPG OF 20/40 MESH OTTAWA SAND.
4. PUMP 12,000 GALLONS OF 65 Q N2/VIKING ID-30 AT 30 BPM WITH SAND RAMPED FROM 1 PPG TO 2 PPG OF 20/40 MESH OTTAWA SAND.
5. PUMP 15,000 GALLONS OF 65 Q N2/VIKING ID-30 AT 30 BPM WITH SAND RAMPED FROM 2 PPG TO 3 PPG OF 20/40 MESH OTTAWA SAND.

*** THE ABOVE BREAKER SCHEDULE SHOULD BE BASED ON 2-7 HOUR BREAK AT 125 DEG. F ***
6. PUMP 13,000 GALLONS OF 65 Q N2/VIKING ID-30 AT 30 BPM WITH SAND RAMPED FROM 3 PPG TO 4 PPG OF 20/40 MESH OTTAWA SAND. (INCREASE BREAKER TO ALLOW A 2 HOUR BREAK AT 115 DEG. F)
7. PUMP 14,778 GALLONS OF 65Q N2 FOAM-30 AT 30 BPM WITH SAND RAMPED FROM 4 PPG TO 5 PPG OF 20/40 MESH OTTAWA SAND.
8. FLUSH WELL WITH 5,000 GALLONS OF 60 Q N2 FOAM-30 AT 30 BPM OR RATE REQUESTED BY SIRGO. (RECACULATE FLUSH VOLUME ON LOCATION)

THE WESTERN COMPANY**PROPPANT PROFILE STUDY
WEST-FOAM ANALYSIS
GEERTSMA-DE KLERK GEOMETRY**

OPERATOR	SIRGO BROTHERS ENERGY CORP.
WELL	NORTH WEST CHA CHA #25
FIELD	CHA CHA
COUNTY, STATE	SAN JUAN, NM
FORMATION	GALLUP A & B
PREPARED BY	MIKE MCNEESE
DATE	OCTOBER 21, 1994

RESERVOIR PARAMETERS

Permeability to Reservoir Fluid	4.0000 md
Porosity	15.00 percent
Reservoir Fluid Viscosity	1.800 cp
Reservoir Fluid Compressibility	1.30E-06 1/psi
Young's Modulus	5.00E+06 psi
Bottom Hole Fracture Pressure	3346 psi
Reservoir Pressure	2250 psi

FOAM PARAMETERS

Power Law Model	
Foam Quality	65 percent
Leak-off Fluid Viscosity	1.0000 cp
Permeability to West Foam	2.40000 md
Fluid Spurt Loss	0.00 cc
Stim Fluid C III at 1000 psi	2.11E-03 ft/sqrt(min)
Combined C	2.71E-04 ft/sqrt(min)
N Prime	0.489
K Prime	0.08100 lbf sec ⁿ /ft ²

TREATMENT PARAMETERS

Injection Rate	30.0 bpm
Total Volume	92715 gal
Fluid Penetration	988 ft
Average Width while Pumping	0.674 in
Gross Fracture Height	100 ft
Net Fracture Height	45 ft

THE WESTERN COMPANY**PROPPANT PROFILE STUDY
WEST-FOAM ANALYSIS
GEERTSMA-DE KLERK GEOMETRY**

FLUID VOLUME (GALS)	PROPPANT TYPE	SURFACE PROPPANT CONC. (LB/GAL)	LOCATION IN FRACT. (FT)		AVERAGE PROPPED WIDTH (IN)	FRACTURE PROPPANT CONC. (LB/FT ²)	CUMULATIVE CUMULATIVE PROPPANT (LBS)
			FROM	TO			
20000	PAD	0.00	793	988	0.0000	0.000	0
10000	SAND	0.75	688	793	0.0418	0.359	7500
12000	SAND	1.50	555	688	0.0788	0.676	25500
15000	SAND	2.50	376	555	0.1216	1.044	63000
13000	SAND	3.50	207	376	0.1574	1.351	108500
14778	SAND	4.50	0	207	0.1869	1.605	175001
TOTAL FOAM VOLUME -						84778 GAL	

The Western Company

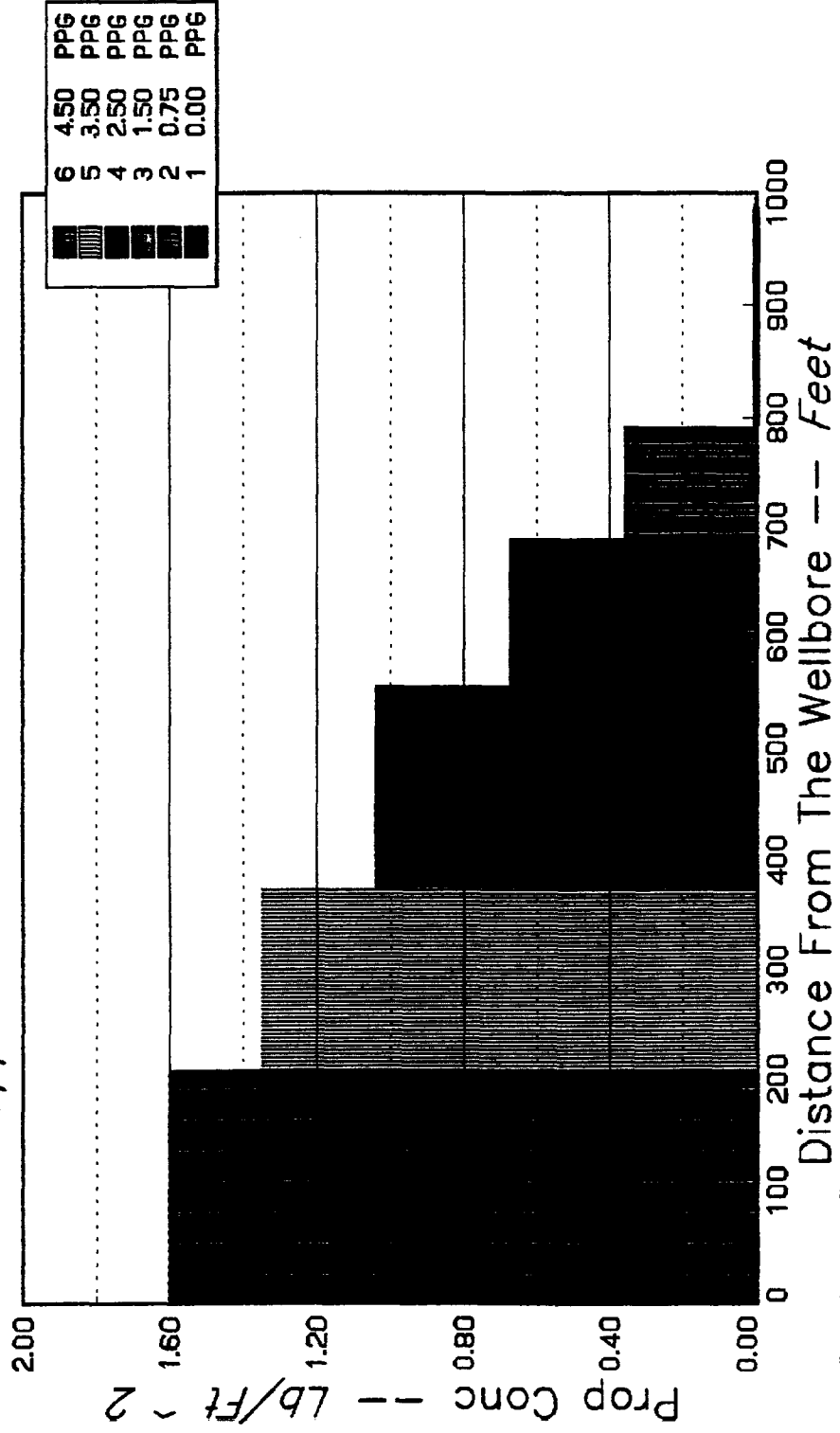
Proppant Profile Study

Foam Frac



Geertsma-De Klerk Geometry

Proppant Distribution In The Fracture



SIRGO BROTHERS ENERGY CORP.
 NORTH WEST CHA CHA #25
 GALLUP A & B

THE WESTERN COMPANY

NITROGEN FOAM PUMPING SCHEDULE

OPERATOR	SIRGO BROTHERS ENERGY CORP.
WELL	NORTH WEST CHA CHA #25
FIELD	CHA CHA
COUNTY, STATE	SAN JUAN, NM
FORMATION	GALLUP A & B
PREPARED BY	MIKE MCNEESE
DATE	OCTOBER 21, 1994

WELL AND RESERVOIR PARAMETERS

Depth (mid perforation)	5148 ft
Bottom Hole Frac Pressure	3346 psi
Bottom Hole Static Temperature	130 deg F

TREATMENT PARAMETERS

Treating Conductor I.D.	4.950 in
Fluid Specific Gravity	1.010
Gel Temperature in Tanks	70 deg F
Temperature of N2 at surface	100 deg F
Foam Injection Rate	30.0 bpm
Total Slurry Treatment Volume	102715 gal

Foam Quality and Injection Rate are held constant downhole.

CALCULATED TEMPERATURES

	Low	High
Foam at Surface	70 deg F	73 deg F
Foam at Perfs	72 deg F	78 deg F

Average Formation Pumping Temperature 119 deg F

THE WESTERN COMPANY

NITROGEN FOAM PUMPING SCHEDULE

PROCEDURE

STAGE	DOWNHOLE FOAM VOLUME (GALS)	DOWNHOLE FOAM QUALITY	DOWNHOLE FOAM RATE (BPM)	PROPPANT				CLEAN GEL VOLUME (BBLs)	N2 VOLUME (MSCF)
				CONC. LB/GAL	MESH	TYPE	(LBS)		
PP1	5000	0.0	11.0	0.00			0	119.0	0.00
1	20000	65.0	30.0	0.00			0	166.7	331.31
2	10000	65.0	30.0	0.75	20/40	SAND	7500	83.3	165.66
3	12000	65.0	30.0	1.50	20/40	SAND	18000	100.0	198.81
4	15000	65.0	30.0	2.50	20/40	SAND	37500	125.0	248.52
5	13000	65.0	30.0	3.50	20/40	SAND	45500	108.3	215.39
6	14778	65.0	30.0	4.50	20/40	SAND	66501	123.2	244.85
FLUSH	5000	60.0	30.0	0.00	FLUSH		0	47.6	76.57
	94778						175001	873.2	1481.11

TREATMENT SCHEDULE

STAGE	PROPPANT CONC. (LB/GAL)		CLEAN GEL RATE (BPM)	BLEND SLURRY RATE (BPM)	SLURRY VOLUME (WITHOUT N2)			N2 RATE SCFM	PROP RATE LB/MIN	STAGE PUMP TIME HH:MM:SS
	PERF.	BLNDR			(BBLs)	(CUM.)	ON PERFS			
PP1	0.00	00.0	11.00	11.00	119.0	119	119	0	0	00:10:49
1	0.00	00.0	10.50	10.50	166.7	286	161	20872	0	00:15:52
2	0.75	2.14	10.15	11.14	91.4	377	330	20187	914	00:08:12
3	1.50	4.29	9.83	11.74	119.4	497	424	19545	1770	00:10:10
4	2.50	7.14	9.43	12.49	165.5	662	546	18750	2829	00:13:15
5	3.50	10.00	9.06	13.17	157.5	820	714	18016	3806	00:11:57
6	4.50	12.86	8.72	13.81	195.0	1014	874	17338	4709	00:14:07
FLUSH	0.00	00.0	12.00	12.00	47.6	1062	1062	19296	0	00:03:58
TOTAL PUMP TIME:										01:28:22

THE WESTERN COMPANY

FOAM PRESSURE/VOLUME ANALYSIS

OPERATOR	SIRGO BROTHERS ENERGY CORP.
WELL	NORTH WEST CHA CHA #25
FIELD	CHA CHA
COUNTY, STATE	SAN JUAN, NM
FORMATION	GALLUP A & B
PREPARED BY	MIKE MCNEESE
DATE	OCTOBER 21, 1994

INPUT PARAMETERS

Treatment via	5 1/2", 15.5	lb pipe
Number of Perforations		38
Perforation Diameter		0.500 in
Total Treatment Volume		84778 gals
Flush Volume		5146 gals
Bottom Hole Frac Pressure		3346 psi
Foam Injection Rate		30.0 bpm
Foam Quality		65.0 percent
Temperature of N2 at Surface		100 deg F
Design Formation Temperature		119 deg F
Specific Gravity of Base Fluid		1.01
Well Depth		5148 ft
I.D. of Treating Conductor		4.950 in
Friction Pressure		60 psi/1000 ft

PREDICTED PRESSURES

Fluid Rate	10.5 bpm
Perforation Pressure Drop	10.2 psi
Foam Friction Pressure	309 psi
Surface Treating Pressure	2601 psi
ISDP with Nitrogen	2863 psi
ISDP with Foam	2350 psi
Nitrogen Rate	20624 scfm

VOLUME REQUIREMENTS

	USING NITROGEN AS FLUSH		USING FOAM AS FLUSH	
	NITROGEN SCF	FLUID GALS	NITROGEN SCF	FLUID GALS
TREATMENT FLUSH	1387647 126379	29672 0	1387647 78313	29672 1801
TOTALS	1514027	29672	1465960	31474

THE WESTERN COMPANY**COST ESTIMATE****N.W. CHA CHA #25 - X-L FOAM**

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1125	GAL	ACETIC ACID 10%, ORGANIC ACID	0.92	1,035.00	38.0	641.70
68	GAL	B-31, GEL BREAKER CATALYST/BUFFER	12.50	850.00	38.0	527.00
68	LBS	B-5, GEL BREAKER	4.50	306.00	38.0	189.72
76	EACH	BALL SEALERS, RCN 7/8" SG 1.3	2.37	180.12	38.0	111.67
6	GAL	CITRIC ACID LIQUID, IRON CONTROL	12.35	74.10	38.0	45.94
10	GAL	CL-2L, CROSSLINKER	13.55	135.50	38.0	84.01
19	GAL	CL-30, CROSSLINKER	30.45	578.55	38.0	358.70
1	GAL	CLAY MASTER-5, CLAY CONTROL	32.95	32.95	38.0	20.43
18	LBS	FRAC-CIDE 20, BACTERIACIDE	37.00	666.00	38.0	412.92
159	GAL	FRAC-FOAM 1, FOAMING AGENT	26.95	4,285.05	38.0	2,656.73
3	GAL	I-8A, CORROSION INHIBITOR	45.35	136.05	38.0	84.35
1000	LBS	J-4, GELLING AGENT	4.85	4,850.00	38.0	3,007.00
35	GAL	NINE-40, SURFACTANT	36.25	1,268.75	38.0	786.63
32	LBS	ULTRA PERM BREAKER, C.R.B.	35.00	1,120.00	0.0	1,120.00
40	MILES	CHEMICALS DELIVERY, HEAVY VEHICLE	2.95	118.00	38.0	73.16
1125	GAL	ACETIC ACID > 10%, ADD. COST	0.45	506.25	38.0	313.88
55	GAL	TECHNI-HIB 756	24.85	1,366.75	38.0	847.39
125	GAL	METHANOL, MEOH	1.65	206.25	0.0	206.25
55	GAL	TECHNI-SOLV 155	24.15	1,328.25	38.0	823.52
1750	CWT	MODERATE SGTH 20/40 PUMP CHG (GAS)	0.42	735.00	38.0	455.70
5174	GAL	PROP CONC PUMP CHG(FOAM) 12.1-16 PPG	0.26	1,345.24	38.0	834.05
4200	GAL	PROP CONC PUMP CHG(FOAM) 4.1 TO 6 PPG	0.07	294.00	38.0	182.28
5250	GAL	PROP CONC PUMP CHG(FOAM) 6.1-9 PPG	0.13	682.50	38.0	423.15
4549	GAL	PROP CONC PUMP CHG(FOAM) 9.1-12 PPG	0.20	909.80	38.0	564.08
1750	CWT	20/40 MESH OTTAWA	12.60	22,050.00	38.0	13,671.00
1750	T-M	DELIVERY CHARGE, 20 MILES	1.00	1,750.00	38.0	1,085.00
1	UNIT	MASTER MIXER 11 TO 20 BPM (GAS)	1,105.00	1,105.00	38.0	685.10
765	HHP	FRAC PUMP (GAS) (12 BPM, 2601 PSI)	6.05	4,628.25	38.0	2,869.51
1	UNIT	ACID PUMP 2501-5000 PSI	820.00	820.00	38.0	508.40
40	MILES	LIGHT EQUIPMENT 2 VEH. 20 MILES	1.80	72.00	38.0	44.64
140	MILES	HEAVY EQUIPMENT 7 VEH. 20 MILES	2.95	413.00	38.0	256.06
1	UNIT	BLENDING CHARGE 2 HRS	500.00	1,000.00	38.0	620.00
1	EACH	DENSIOMETER	575.00	575.00	38.0	356.50
1	USE	LIQUID ADD PUMP	750.00	750.00	38.0	465.00
1	USE	MANUAL BALL INJECTOR	140.00	140.00	38.0	86.80
1	EACH	SANDMASTER, FIRST 3 DAYS	925.00	925.00	38.0	573.50
1	DAYS	SKID, QC, GEL MONITORING	450.00	450.00	38.0	279.00
1	EACH	TREATMENT MONITORING VAN (T.M.V.)	1,965.00	1,965.00	0.0	1,965.00
500	C-SCF	NITROGEN	1.89	945.00	34.0	623.70
14311	C-SCF	NITROGEN > 50000 SCF	1.84	26,332.42	34.0	17,379.40
20	MILES	LIGHT EQUIPMENT 1 VEH. 20 MILES	1.80	36.00	34.0	23.76
120	MILES	HEAVY EQUIPMENT 6 VEH. 20 MILES	2.95	354.00	34.0	233.64
5	UNIT	NITROGEN PUMPING 0-4000 SCFM	1,110.00	5,550.00	34.0	3,663.00
1	EACH	N2 TARGET FLOWMETER	290.00	290.00	34.0	191.40

THE TECHNICAL DATA CONTAINED IN THIS PROPOSAL IS BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF WRITING AND IS SUBJECT TO FURTHER ANALYSIS AND TESTING. THE PRICING DATA CONTAINED IN THIS PROPOSAL ARE ESTIMATES ONLY AND MAY VARY DEPENDING ON THE WORK ACTUALLY PERFORMED. PRICING DOES NOT INCLUDE FEDERAL, STATE AND LOCAL TAXES OR ROYALTIES.

THIS QUOTATION IS BASED ON THE WESTERN COMPANY BEING AWARDED THE WORK ON A FIRST CALL BASIS AND WITHIN THIRTY (30) DAYS

THE PROPOSAL DATE. THESE PRICES WILL BE SUBJECT TO REVIEW IF THE WORK IS DONE AFTER THIRTY (30) DAYS FROM THE PROPOSAL DATE, OR ON A SECOND OR THIRD CALL BASIS.

CUSTOMER WILL BE CHARGED FOR ALL 'SPECIAL PROPPANTS' DELIVERED TO LOCATION, WHETHER THEY ARE PUMPED OR NOT. ALL PROPPANTS OTHER THAN STANDARD GRADE FRAC SAND ARE CONSIDERED 'SPECIAL PROPPANTS'.

THE WESTERN COMPANY**COST ESTIMATE****N.W. CHA CHA #25 - X-L FOAM**

QTY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE	GROSS AMOUNT	DISC (%)	NET AMOUNT
1	EACH	SERVICE CHARGE, VALVE ON N2	390.00	390.00	34.0	257.40
TOTALS:				\$93,550.78		\$60,608.05

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THE WESTERN COMPANY

COST ESTIMATE

N.W. CHA CHA #25 - X-L FOAM

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1125	GAL	ACETIC ACID 10%, ORGANIC ACID	641.70
68	GAL	B-31, GEL BREAKER CATALYST/BUFFER	527.00
68	LBS	B-5, GEL BREAKER	189.72
76	EACH	BALL SEALERS, RCN 7/8" SG 1.3	111.67
6	GAL	CITRIC ACID LIQUID, IRON CONTROL	45.94
10	GAL	CL-2L, CROSSLINKER	84.01
19	GAL	CL-30, CROSSLINKER	358.70
1	GAL	CLAY MASTER-5, CLAY CONTROL	20.43
18	LBS	FRAC-CIDE 20, BACTERIACIDE	412.92
159	GAL	FRAC-FOAM 1, FOAMING AGENT	2,656.73
3	GAL	I-8A, CORROSION INHIBITOR	84.35
1000	LBS	J-4, GELLING AGENT	3,007.00
35	GAL	NINE-40, SURFACTANT	786.63
32	LBS	ULTRA PERM BREAKER, C.R.B.	1,120.00
40	MILES	CHEMICALS DELIVERY, HEAVY VEHICLE	73.16
1125	GAL	ACETIC ACID > 10%, ADD. COST	313.88
55	GAL	TECHNI-HIB 756	847.39
125	GAL	METHANOL, MEOH	206.25
55	GAL	TECHNI-SOLV 155	823.52
1750	CWT	MODERATE SGTH 20/40 PUMP CHG (GAS)	455.70
5174	GAL	PROP CONC PUMP CHG(FOAM) 12.1-16 PPG	834.05
4200	GAL	PROP CONC PUMP CHG(FOAM)4.1 TO 6 PPG	182.28
5250	GAL	PROP CONC PUMP CHG(FOAM)6.1-9 PPG	423.15
4549	GAL	PROP CONC PUMP CHG(FOAM)9.1-12 PPG	564.08
1750	CWT	20/40 MESH OTTAWA	13,671.00
1750	T-M	DELIVERY CHARGE, 20 MILES	1,085.00
1	UNIT	MASTER MIXER 11 TO 20 BPM (GAS)	685.10
765	HHP	FRAC PUMP (GAS) (12 BPM, 2601 PSI)	2,869.51
1	UNIT	ACID PUMP 2501-5000 PSI	508.40
40	MILES	LIGHT EQUIPMENT 2 VEH. 20 MILES	44.64
140	MILES	HEAVY EQUIPMENT 7 VEH. 20 MILES	256.06
1	UNIT	BLENDING CHARGE 2 HRS	620.00
1	EACH	DENSIOMETER	356.50
1	USE	LIQUID ADD PUMP	465.00
1	USE	MANUAL BALL INJECTOR	86.80
1	EACH	SANDMASTER, FIRST 3 DAYS	573.50
1	DAYS	SKID, QC, GEL MONITORING	279.00
1	EACH	TREATMENT MONITORING VAN (T.M.V.)	1,965.00
500	C-SCF	NITROGEN	623.70
14311	C-SCF	NITROGEN > 50000 SCF	17,379.40
20	MILES	LIGHT EQUIPMENT 1 VEH. 20 MILES	23.76
120	MILES	HEAVY EQUIPMENT 6 VEH. 20 MILES	233.64
5	UNIT	NITROGEN PUMPING 0-4000 SCFM	3,663.00
1	EACH	N2 TARGET FLOWMETER	191.40

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THE WESTERN COMPANY**COST ESTIMATE****N.W. CHA CHA #25 - X-L FOAM**

QTY	UNIT	PRODUCT DESCRIPTION	NET AMOUNT
1	EACH	SERVICE CHARGE, VALVE ON N2	257.40
TOTALS:			\$60,608.05

THE TECHNICAL DATA CONTAINED IN THIS PROPOSAL IS BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF WRITING AND IS SUBJECT TO FURTHER ANALYSIS AND TESTING. THE PRICING DATA CONTAINED IN THIS PROPOSAL ARE ESTIMATES ONLY AND MAY VARY DEPENDING ON THE WORK ACTUALLY PERFORMED. PRICING DOES NOT INCLUDE FEDERAL, STATE AND LOCAL TAXES OR ROYALTIES.

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PRODUCT DESCRIPTIONS

ACETIC ACID (Organic Acid)

Acetic acid is primarily used in acidizing applications where significant retardation of the acid reaction rate is desired. Acetic acid is commonly used in perforating operations.

B-31 (Gel Breaker Catalyst/Buffering Agent)

A liquid catalyst for use in conjunction with B-5 and Ultra Perm CRB™, in low temperatures (below 120 Degrees Fahrenheit) water-base fracturing fluids.

™Trademark of Western Company of North America.

B-5 (Gel Breaker)

An ammonium persulfate oxidizing breaker use in moderate temperatures (120 to 200 Degrees Fahrenheit) wells to sufficiently reduce the viscosity of crosslinked gels allowing for clean-up of the treating system. Used in conjunction with a catalyst, it may be run at low temperatures (below 120 Degrees Fahrenheit).

BS-713 (Ball Sealers)

Uncoated and rubber covered (nylon) foam balls used for diversion.
Specific Gravity - 1.3

CITRIC ACID (Iron Control Agent)

A liquid sequestering agent used to prevent the precipitation of metal oxides.

CL-2L (Crosslinker)

A liquid borate crosslinker (Boric Acid) used in Viking gel systems.

CL-30 (Crosslinker)

A slurried delayed borate crosslinker used in the high temperature Viking D gel systems.

CLAY MASTER-5 (Clay Control)

A long chain polymer used in water, brine or acids to protect the formation against damage due to clay swelling, sloughing and migration.

FRAC-CIDE 20 (Bactericide)

An extremely effective biocide for the inhibitory control of aerobic and anaerobic (sulfate-reducing) bacteria in well treatment fluids. It is packaged as a dry powder for safety and easy of handling in all weather conditions.

FRAC FOAM-1 (Foaming Agent)

An amphoteric (cationic and anionic) surfactant used as a foaming agent for water and acid-base fracturing fluids.

PRODUCT DESCRIPTIONS

I-8A (Corrosion Inhibitor)

An organic acid corrosion inhibitor for use in organic acid solutions such as acetic and formic acid. Depending on the acid strength, corrosion inhibition is attained at temperatures up to 500 Degrees Fahrenheit.

J-4 (Gelling Agent)

A guar gum gelling agent blended with a buffering system. It is used in gelled water, gelled acid and crosslinked water-base fluids. The polymer residue is 6% to 9% by weight.

NINE-40 (Surfactant)

A nonionic non-emulsifier with excellent load recovery capabilities in some reservoirs.

ULTRA PERM CRB™ (Gel Breaker)

A controlled release breaker (C.R.B.) for use in water-base fracturing fluids. It degrades aqueous gels and reduces gel residues to facilitate fluid recovery following fracture treatments. The filter cake degradation increases production rates due to significantly lower residue in the proppant pack and on the fracture face. It degrades the base polymer for crosslinked and linear gel systems. Used in reservoirs of temperatures between 90 and 350 Degrees Fahrenheit.

™Trademark of the Western Company of North America.

THE WESTERN COMPANY

FIELD RECEIPT WORKSHEET

N.W. CHA CHA #25 - X-L FOAM

PRODUCT CODE	QUANTITY	UNIT	PRODUCT DESCRIPTION	UNIT PRICE
C3006	1125	GAL	ACETIC ACID 10%, ORGANIC ACID	0.92
H0556	68	GAL	B-31, GEL BREAKER CATALYST/BUFFER	12.50
H0906	68	LBS	B-5, GEL BREAKER	4.50
H3556	76	EACH	BALL SEALERS, RCN 7/8" SG 1.3	2.37
H1086	6	GAL	CITRIC ACID LIQUID, IRON CONTROL	12.35
H1846	10	GAL	CL-2L, CROSSLINKER	13.55
H1286	19	GAL	CL-30, CROSSLINKER	30.45
H2306	1	GAL	CLAY MASTER-5, CLAY CONTROL	32.95
H0356	18	LBS	FRAC-CIDE 20, BACTERIACIDE	37.00
H2186	159	GAL	FRAC-FOAM 1, FOAMING AGENT	26.95
C0086	3	GAL	I-8A, CORROSION INHIBITOR	45.35
H0846	1000	LBS	J-4, GELLING AGENT	4.85
H0146	35	GAL	NINE-40, SURFACTANT	36.25
H1016	32	LBS	ULTRA PERM BREAKER, C.R.B.	35.00
J7406	40	MILES	CHEMICALS DELIVERY, HEAVY VEHICLE	2.95
NOTPR	1125	GAL	ACETIC ACID > 10%, ADD. COST	0.45
NOTPR	55	GAL	TECHNI-HIB 756	24.85
NOTPR	125	GAL	METHANOL, MEOH	1.65
NOTPR	55	GAL	TECHNI-SOLV 155	24.15
E118AB	1750	CWT	MODERATE SGTH 20/40 PUMP CHG (GAS)	0.42
J4646B	5174	GAL	PROP CONC PUMP CHG(FOAM) 12.1-16 PPG	0.26
J4616B	4200	GAL	PROP CONC PUMP CHG(FOAM)4.1 TO 6 PPG	0.07
J4626B	5250	GAL	PROP CONC PUMP CHG(FOAM)6.1-9 PPG	0.13
J4636B	4549	GAL	PROP CONC PUMP CHG(FOAM)9.1-12 PPG	0.20
NOTPR	1750	CWT	20/40 MESH OTTAWA	12.60
J4016	1750	T-M	DELIVERY CHARGE, 20 MILES	1.00
F3026B	1	UNIT	MASTER MIXER 11 TO 20 BPM (GAS)	1105.00
F2016B	765	HHP	FRAC PUMP (GAS) (12 BPM, 2601 PSI)	6.05
F7026	1	UNIT	ACID PUMP 2501-5000 PSI	820.00
J3916	40	MILES	LIGHT EQUIPMENT 2 VEH. 20 MILES	1.80
J3906	140	MILES	HEAVY EQUIPMENT 7 VEH. 20 MILES	2.95
J2186	1	UNIT	BLENDING CHARGE 2 HRS	500.00
J3216	1	EACH	DENSIOMETER	575.00
J0556	1	USE	LIQUID ADD PUMP	750.00
J5016	1	USE	MANUAL BALL INJECTOR	140.00
J3106	1	EACH	SANDMASTER, FIRST 3 DAYS	925.00
J3016	1	DAYS	SKID, QC, GEL MONITORING	450.00
J3006	1	EACH	TREATMENT MONITORING VAN (T.M.V.)	1965.00
N023E	500	C-SCF	NITROGEN	1.89
N003E	14311	C-SCF	NITROGEN > 50000 SCF	1.84
J3916	20	MILES	LIGHT EQUIPMENT 1 VEH. 20 MILES	1.80
J3906	120	MILES	HEAVY EQUIPMENT 6 VEH. 20 MILES	2.95
N2006	5	UNIT	NITROGEN PUMPING 0-4000 SCFM	1110.00
N1686	1	EACH	N2 TARGET FLOWMETER	290.00
H4456	1	EACH	SERVICE CHARGE, VALVE ON N2	390.00

DRILLING AND COMPLETION REPORT
WEEK OF OCTOBER 31 THROUGH NOVEMBER 4

NW CHA CHA UNIT #25
2431' FSL & 1889' FWL
UNIT K SEC. 22
T29N, R14W, NMPM
SAN JUAN COUNTY, NM

REPORT NO. 2
SIRGO BROS. ENERGY CORP.
PROPOSED TD 5330'
CHA CHA (GALLUP) TEST
GL ELEV 561. '

DATE DESCRIPTION
10-31-94 28 Swab runs

<u>PRESS</u>	<u>NO. SWAB RUNS</u>	<u>FLUID LEVEL</u>	<u>BBL. RECVD</u>	<u>TIME</u>
520#	4	2600'	20	8:00-9:00 a.m.
500#	4	1800'	20	9:00-10:00 a.m.
500#	Flowing	Surf	18	10:00-11:00 a.m.
520#	4	2300'	20	11:00-12 noon
440#	4	2700'	20	12 noon-1:00 p.m.
420#	4	2700'	20	1:00-2:00 p.m.
400#	4	3000'	20	2:00-3:00 p.m.
360#	4	3200'	20	3:00-4:00 p.m.

Rec. 79 BO + 79 BLW - 8 hrs. 220 bbls. lcr wtr left to rec.

11-1-94 Blew well down thru 1/4" choke to tank (FL at surface). POH w/tubing after tagging 75' of fill. RIH w/2-7/8" bailer. Bailed out to PSTD at 5289'. POH w/tubing and bailer. Prep to run prod tubing, rods and pump and hang on production.

11-2-94 PU RIH w/4' perf sub, two jts. tubing, 2-1/4" tubing pump + 165 jts. tubing. ND BOP, land tubing, EOT at 5245'. Build wellhead. PU RIH w/2-1/4" plunger + 145 3/4" rods. SIFN.

11-3-94 PU RIH w/61 7/8" rods + polish rod. Space well out. Started well pumping at 1:00 p.m.

11-4-94 At 7:00 a.m. well made 300 bbls in 18 hrs. Current rate 15 bbls/hr. Will get oil cut in tank this afternoon. (First 120 bbls of 300 bbls was oil as per field witness. Don't know cut yet from second 180 bbls.)