

"GAS PROSPECT EVALUATION DATA SHEET"

Prospect: \_\_\_\_\_ Loc: Sec 32 Twp 25S Rge 37E  
 Well: Arnott Ramsay No. 13 Actual Pool: Jalmat (Gas)  
 Producing Zone: Jalmat (Y-7R-Qn) First Production: 1-90

I. ENGINEERING/GEOLOGICAL

1. Acreage Factor 1.0 2. Initial SIWHP (psig) 240  
 3. Line Pressure (psig) 102 4. Coeff. "C" (SCFPD/psia<sup>2</sup>) 72  
 5. P/z Slope (MCF/psia) 10,000 6. Reserves (BCF) 2.17 BCF  
 7. Compressor (Years) 4.30  
 8. Initial Allowable 600 Allowable Decline Rate 0  
 Q<sub>w</sub> equals MRA @ Time 6.74 Yrs Qi - 600  
 Decline Rate: 26.80  
 9. GOR/Yield \_\_\_\_\_  
 10. Economic Parameters:  
 Discount Rate 10% Start Date 1-1-90 As-Of Date 9-15-90  
 11. Comments: \_\_\_\_\_

II. LAND

1. P.U. Description NE/4, S/2 SE/4 & NW/4 SE/4 Section 32,  
T-25-S, R-37-E  
 2. Date Acquired -- 3. Gross Acres 280  
 4. Initial Ownership: WI \_\_\_\_\_ NRI \_\_\_\_\_  
 5. Additional Ownership: WI -- NRI --  
 6. Total Participation: WI 75% NRI 56.25%  
 Net WI Acres 210 Acreage Price (\$/Ac) \$374.18  
 Net Acreage Cost (\$) 78,577.80 Acreage Cost @ 100% WI (\$) 104,770.25

III. GAS PRICING

1. Gatherer Spot Marketing NNG Contract No. None  
 2. Contract Pricing None Spot Pricing Major Pipeline  
 3. FERC Pricing Section 103 4. Average WHBTU \_\_\_\_\_  
 5. Comments: Major Pipeline + DRI + AGA

6. Average Annual Price (\$/MCF, inclusive of taxes):  
 1989 -- 1990 1.900 1991 2.574 1992 2.808  
 1993 3.064 1994 3.331 1995 3.608 1996 3.842  
 1997 4.082 1998 4.329 1999 4.583 2000 4.844  
 7. Escalation Rate Beyond 2000 (%/Year) 5.4%/yr to life

IV. OIL PRICING

1. Average Annual Price (\$/BBL):  
 1989 -- 1990 -- 1991 -- 1992 --  
 1993 -- 1994 -- 1995 -- 1996 --  
 2. Escalation Rate Beyond 1996 (%/Year) N/A

V. INVESTMENT COSTS/OPERATING COSTS

Tangible Cost \$62,095  
 Intangible Cost \$271,995  
 Completed Well Cost \$334,091  
 Leasehold (100%) Cost \$104,770  
 Compression Cost 23,895 (Gath) + 55,637\* (Comp) = 79,532 (Total)  
 Total Well Cost \$518,392  
 Operating/Overhead Cost (\$/Mo.) \$1300/mo. initial increasing to  
3050/mo. @ 4.30 yrs  
 Escalation Rate (%/Year) 4%/yr  
 Beginning Escalation Date 1-1-90

\*Cost of well compression installation at 4.30 years

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Pa(pisia)= 23  
 Pi(pisia)= 240  
 M(mcf/psia)= 10,000  
 C(sect/d/psia^2)= 74  
 PRORAT-FAC= 1.00  
 Q(ai)(mcf/d)= 600  
 Lp(psig)= 102  
 D(%/year)= 0  
 MONTHS (1st YR)= 12  
 EMAS(%)= 0  
 LOE(\$/MO)= 1,300  
 LOE(\$/MCF)= 0.07

ARNOTT RAMSAY # 13  
 WELL DELIVERABILITY VS. MARKET RATEABLE TAKE  
 JALMAT FIELD  
 LEA COUNTY, NEW MEXICO  
 DEL DATE: 1-1-90

08-Nov-90  
 P17-RAM1

YEAR	DT	Qa	YEARLY dq	YEARLY SUM dq	dp	SUM dp	Pe	qd(lp)	qd(10)	DT	SUM DT	DT(YRS) CAPACITY	DT(YRS) NON-CAP	TOTAL YEARS
1990	0	600	219000	219000	21.9	21.9	218.1	2538	3481	0	0	0.0	1.0	1.0
1991	1	600	219000	438000	21.9	43.8	196.2	1867	2809	0	0	0.0	2.0	2.0
1992	2	600	219000	657000	21.9	65.7	174.3	1266	2209	0	0	0.0	3.0	3.0
1993	3	600	219000	876000	21.9	87.6	152.4	737	1680	0	0	0.0	4.0	4.0
1994	4	600	219000	1095000	21.9	109.5	130.5	278	1221	0	0	0.0	5.0	5.0
1995	5	600	219000	1314000	21.9	131.4	108.6	0	834	0	0	0.0	6.0	6.0
1996	6	600	219000	1533000	21.9	153.3	86.7	0	517	278	278	0.8	0.0	6.8
1997	7	600	219000	1752000	21.9	175.2	64.8	0	272	278	556	2.4	0.0	8.4
1998	8	600	219000	1971000	21.9	197.1	42.9	0	97	2257	872	0.0	0.0	8.4
1999	9	600	219000	2190000	21.9	219.0	21.0	0	0	0	0	0.0	0.0	8.4
2000	10	600	219000	2409000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2001	11	600	219000	2628000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2002	12	600	219000	2847000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2003	13	600	219000	3066000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2004	14	600	219000	3285000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2005	15	600	219000	3504000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2006	16	600	219000	3723000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2007	17	600	219000	3942000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2008	18	600	219000	4161000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2009	19	600	219000	4380000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2010	20	600	219000	4599000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2011	21	600	219000	4818000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2012	22	600	219000	5037000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2013	23	600	219000	5256000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2014	24	600	219000	5475000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2015	25	600	219000	5694000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2016	26	600	219000	5913000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2017	27	600	219000	6132000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4
2018	28	600	219000	6132000	21.9	0.0	0.0	0	0	0	0	0.0	0.0	8.4

\* COMPRESSION (YRS) = 4.30  
 \*\* CAPACITY (YRS) = 6.74  
 LOE @ COMPRESSION(\$/MO)= \$3,050  
 GAS RESERVES (MMCF)= 2,170

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COMPUTATION OF RESERVES  
 DOYLE HARTMAN - ARNOTT RAMSAY NO. 13  
 0-32-255-37E  
 JALMAT GAS POOL  
 LEA COUNTY, NEW MEXICO

<u>OPERATOR</u>	<u>WELL NAME</u>	<u>WELL LOCATION</u>	<u>M = SLOPE MCF/DST</u>
ALPHA 21	El Paso Tom Fed. #7	L-33-25-37	8,118
ALPHA 21	El Paso Tom Fed. #6	J-33-25-37	11,000
MERIDIAN	Farnsworth "C" #2	G-04-26-37	9,750
MERIDIAN	Farnsworth "C" #1	N-04-26-37	15,314
CHEVRON	Arrott Ramsay NCT-8 #1	M-32-25-37	14,118
<u>HARTMAN</u>	<u>Legal #5</u>	<u>P-31-25-37</u>	<u>12,903</u>

AVERAGE OF ALL WELLS

11,867

AVERAGE USED FOR CALCULATION

10,000

RECOVERABLE RESERVES = 10,000 x (240-23) = 2.17 BCF