

Buffalo XXII Operating, LLC

Reserve Study of the Wells

Of Buffalo XXII Operating LLC

In Madison County Texas

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Tab I

Jackson Petroleum Consulting, Inc.

2504 Baffin Bay Ct, Plano, Texas 75075

Ph. #:972-672-1612; billyjack@jacksonpetro.com

October 5, 2023

John Westmoreland
Buffalo XXII Operating LLC
25211 Grogans Mill Road, Ste. 350
The Woodlands, TX 77380

Re: Reserve Study of the Assets of Buffalo XXII Operating, LLC in the Fort Trinidad Field in Madison County Texas

Pursuant to your request a reserve study of the producing wells of Buffalo XXII in Madison County was performed based upon the production history acquired from IHSglobal public information service and the Texas Railroad Commission Production reports through June of 2023. Additional proved reserves were also evaluated based upon reworking some wells that are not producing at their maximum deliverability due to perforations that appear to be blocked. In addition, probable reserves were projected for 7 wells that are to be slim hole horizontally drilled in the Georgetown formation. The results of this study as of an effective date of July 1, 2023 were as follows:

Reserve Category	Net Oil Reserves Bbls	Net Gas Reserves Mcf	Future Net Income \$	Present Value of FNI disc@10% \$
Proved Producing	242,920	1,599,500	11,060,470	7,243,080
Proved Non-Producing	298,730	2,508,850	17,306,490	10,792,280
Probable Undeveloped	1,878,000	0	113,974,190	78,521,280
Total All Reserves	2,419,650	4,108,350	142,341,150	96,556,640

The preceding values were generated by using the working and net revenues interest provided by Buffalo for 56 wells completed in the Fort Trinidad field. The product prices used for all of the wells was based upon the price of West Texas Intermediate oil of \$90 per barrel less \$5 per barrel for marketing and transportation in the field resulting in a net price of \$85 per barrel that was fixed for the life of the wells. The gas price used was based upon a Henry Hub price of \$2.50/MMbtu less \$1.50 per Mcf for marketing and transportation with no adjustment for the possible higher energy content of the produced gas resulting in a net gas price of \$1.00/Mcf fixed for the life of the leases. The lease operating costs used in the study were based upon the historical operating expenses except for the gas gathering and transportation costs that were covered by the reduction of the gas prices paid to the wells rather than direct operating costs to the individual wells. The large COPUS charge billed by Burk Royalty operated wells was also deducted

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per the request of Buffalo since the purpose of the study was to assess the purchase price of the property for acquisition, which post acquisition would dramatically reduce the operator management charges historically assessed by Burk.

The proved producing reserves include the producing well interest currently owned by Buffalo XXII that includes wells that are operated by Buffalo XXII, Burk Royalty and Buffco Production, Inc. The active well count for the 3 operators combined was 61 wells in June of 2023, but only 34 wells were economic on the effective date, although many of the other wells were still producing marginal volumes of oil and gas. Despite the drop in active well count versus economically active wells the composite production curve indicates no significant difference is the decline rate or current production rate that was established when the individual well projections are totaled as can be observed on the composite productive plots enclosed.

The proved non-producing reserves were estimated based upon the unusual decline changes in many wells that appears to be due to loss of production due to hole filling that has blocked productive perforations rather than normal depletion. Most of these well are completed in The Glenrose, Edwards, Georgetown and Buda formations that were commingled and put on gas lift after performing a hydraulic fracture of each zone. The wells were then produced by setting a packer above the top zone and installing gas lift for production commingling all 4 zones. No record reviewed showed that the wells have been checked for probable sand fill, which is normal after any hydraulic fracture is performed. The wells picked for workover to remove this fill were chosen because they all appeared to be stabilizing at a higher rate of production for several years and then suddenly increased in decline rate. In addition to the unusual change in decline rate, the wells also show a decrease in Gas to Oil ratio (GOR) that had been stable for many years. If the sudden decline was due to depletion then the GOR should be increasing not decreasing. Finally the deepest perforations are the Glenrose formation which tends to have a higher GOR, which is more evidence that the drop in gas production is due to blocked off perforations. The workover cost was estimated to be \$100,000 per well and the reserve study assumes that Buffalo XXII will perform the work when they have acquired the entire 100% working interest. The reserves used for the workovers are based upon projecting the original established decline to determine the ultimate reserves and then deducting the actual cumulative production through June of 2023. If the wells were still producing economically despite the drop in production then the proved producing reserves remaining at the current rate was also deducted from the projected ultimate reserves with the remaining reserves projected for the proved non-producing volume in the analysis.

The probable undeveloped reserves were evaluated based upon analogy with 14 other Georgetown horizontal wells completed in the area within 5 miles of the wells selected by Mr. Westmoreland for slimhole horizontal development. The 14 wells combined have produced an average of 293,000 barrels of Georgetown oil and 5 of the wells have produced 350,000 barrels or more and are still producing commercially. The better wells produce consistently with no decline for about 6 months and then decline rapidly, but

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tend to begin hyperbolic performance with a factor of 1.2 on the type curve developed. Since none of the wells selected were direct offsets to selected wells for development the reserves were classified as probable rather than proved despite a comparison of the well logs in the wells selected appearing to have similar or better properties of both porosity and water saturation of the wells that have produced horizontally in the Georgetown in the area.

The reserve study includes the summary total for the combined reserves of all reserve categories and a separate summary for each reserve category evaluated with a composite production plot and an economic summary projection. Following these summaries are the individual lease projections and values for all of the wells evaluated.

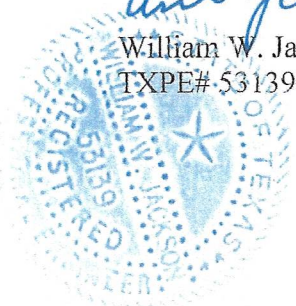
All data used in the analysis was provided by Buffalo XXII, public information services, the Texas Railroad Commission filings or the preparer's private files. All data was accepted as presented and I express no opinion thereon except as stated herein.

Thank you for the opportunity to prepare this report. Should you need clarification on any point please notify me at your earliest opportunity.

Yours truly,



William W. Jackson, PE
TXPE# 53139



Tab II

Date : 10/03/2023 2:05:25PM
Partner : All Cases

ECONOMIC SUMMARY PROJECTION

Buffalo XXII Operating, LLC

All Cases

Discount Rate : 0.00

As of : 07/01/2023

Total

Est. Cum Oil (Mbbbl) : 4,312.85
Est. Cum Gas (MMcf) : 25,951.06
Est. Cum Water (Mbbbl) : 15,565.14

Year	Oil Gross (Mbbbl)	Gas Gross (MMcf)	Oil Net (Mbbbl)	Gas Net (MMcf)	Oil Price (\$/bbl)	Gas Price (\$/Mcf)	Oil & Gas Rev. Net (M\$)	Misc. Rev. Net (M\$)	Costs Net (M\$)	Taxes Net (M\$)	Invest. Net (M\$)	NonDisc. CF Annual (M\$)	Cum Disc. CF (M\$)
2023	100.28	176.63	68.34	114.32	85.00	1.00	5,922.84	0.00	551.06	424.17	7,387.50	-2,439.89	-2,439.89
2024	1,153.87	830.97	878.92	607.42	85.00	1.00	75,315.74	0.00	1,725.23	5,372.60	10,181.75	58,036.15	55,596.27
2025	370.64	696.60	275.35	507.89	85.00	1.00	23,912.65	0.00	1,786.30	1,715.12	0.00	20,411.23	76,007.50
2026	209.27	538.72	150.38	389.09	85.00	1.00	13,171.24	0.00	1,690.63	947.94	0.00	10,532.68	86,540.18
2027	156.46	454.71	110.74	328.83	85.00	1.00	9,742.01	0.00	1,633.56	702.35	0.00	7,406.10	93,946.28
2028	125.27	339.83	87.99	243.37	85.00	1.00	7,722.51	0.00	1,408.92	556.24	0.00	5,757.34	99,703.62
2029	104.61	292.76	73.11	209.13	85.00	1.00	6,423.06	0.00	1,306.65	462.84	0.00	4,653.57	104,357.19
2030	88.00	248.40	61.51	176.59	85.00	1.00	5,405.13	0.00	1,121.24	389.51	0.00	3,894.39	108,251.58
2031	77.18	227.18	53.81	161.34	85.00	1.00	4,734.98	0.00	1,061.59	341.41	0.00	3,331.98	111,583.55
2032	69.28	208.19	48.15	147.29	85.00	1.00	4,239.92	0.00	1,031.79	305.80	0.00	2,902.33	114,485.88
2033	62.84	197.64	43.61	139.91	85.00	1.00	3,846.75	0.00	1,031.79	277.63	0.00	2,537.34	117,023.22
2034	56.26	185.39	38.88	130.99	85.00	1.00	3,435.76	0.00	952.83	248.15	0.00	2,234.78	119,258.00
2035	51.84	178.07	35.86	126.05	85.00	1.00	3,174.23	0.00	943.90	229.41	0.00	2,000.93	121,258.93
2036	47.11	135.09	32.57	94.34	85.00	1.00	2,862.77	0.00	913.14	206.32	0.00	1,743.31	123,002.24
2037	41.51	89.61	29.19	61.56	85.00	1.00	2,543.07	0.00	824.14	182.62	0.00	1,536.30	124,538.54

Rem.	572.63	916.50	431.25	670.22	85.00	1.00	37,326.87	0.00	16,850.64	2,673.62	0.00	17,802.61	17,802.61
Total	50.0	3,287.06	2,419.66	4,108.35	85.00	1.00	209,779.55	0.00	34,833.41	15,035.73	17,569.25	142,341.16	142,341.16
Ult.	7,599.91	31,667.36											

Eco. Indicators

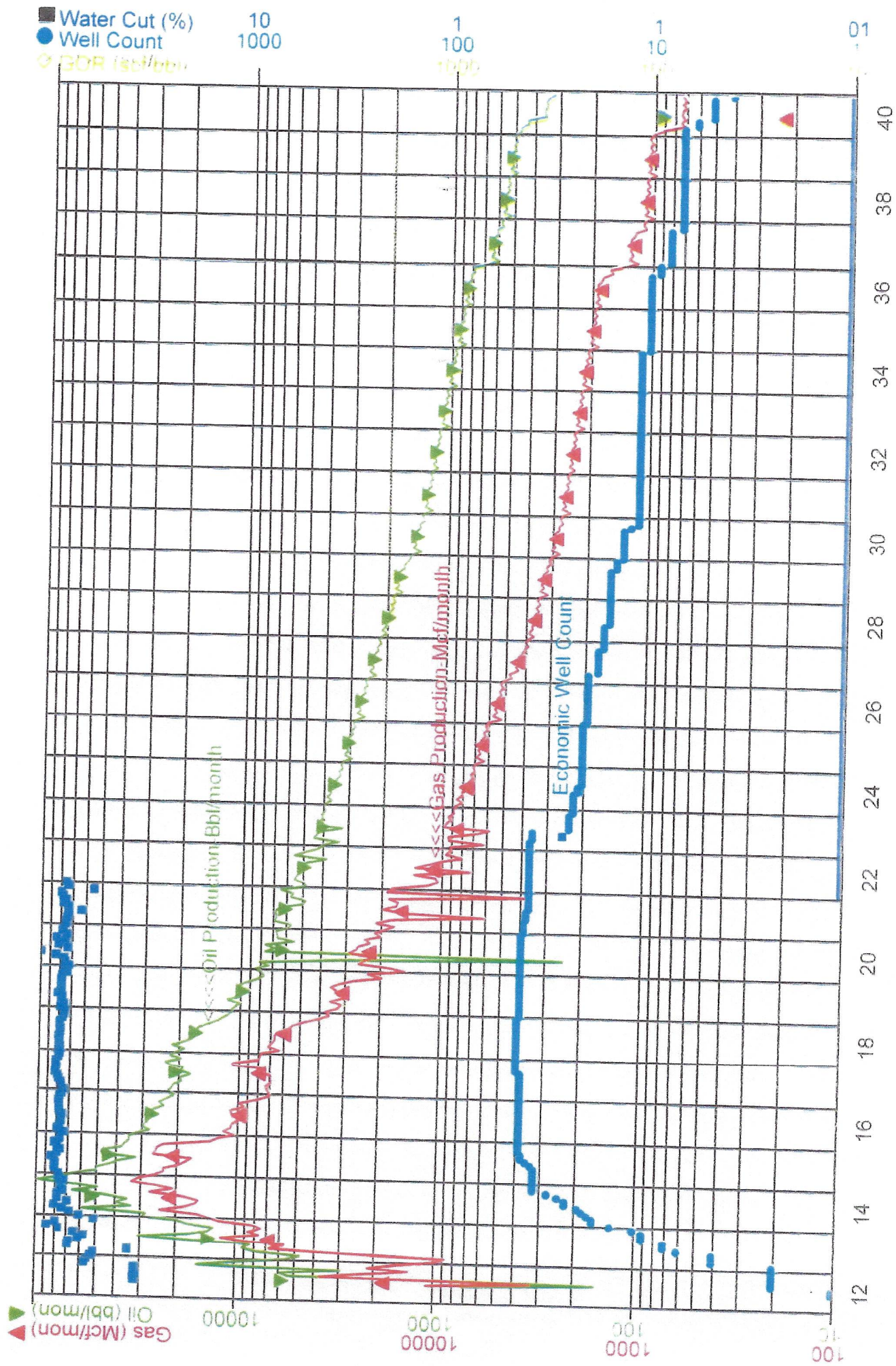
Return on Investment (disc) : 9.102
Return on Investment (undisc) : 9.102
Years to Payout : 0.71
Internal Rate of Return (%) : >1000

Present Worth Profile (M\$)

PW 5.00% :	112,653.28	PW 40.00% :	58,045.23
PW 10.00% :	96,556.64	PW 50.00% :	51,843.61
PW 15.00% :	85,782.11	PW 60.00% :	46,922.29
PW 20.00% :	77,760.88	PW 70.00% :	42,897.27
PW 30.00% :	66,211.54	PW 100.00% :	34,197.59

Field: Ft Trinidad
API Formatted:

Opex: Burk Royally
County, State: Madison, TX



Date : 10/03/2023 2:05:25PM
Partner : All Cases

ECONOMIC SUMMARY PROJECTION

Buffalo XXII Operating, LLC

All Cases

Discount Rate : 0.00

As of : 07/01/2023

Proved Producing Rsv Class & Category

Est. Cum Oil (Mbbbl) : 3,377.17
Est. Cum Gas (MMcf) : 17,791.27
Est. Cum Water (Mbbbl) : 10,200.43

Year	Oil Gross (Mbbbl)	Gas Gross (MMcf)	Oil Net (Mbbbl)	Gas Net (MMcf)	Oil Price (\$/bbl)	Gas Price (\$/Mcf)	Oil & Gas Rev. Net (M\$)	Misc. Rev. Net (M\$)	Costs Net (M\$)	Taxes Net (M\$)	Invest. Net (M\$)	NonDisc. CF Annual (M\$)	Cum Disc. CF (M\$)
2023	34.07	156.87	16.71	98.56	85.00	1.00	1,518.87	0.00	469.43	110.90	0.00	938.53	938.53
2024	60.64	316.06	30.17	205.48	85.00	1.00	2,770.22	0.00	882.27	203.03	0.00	1,684.92	2,623.45
2025	52.53	276.90	26.34	181.09	85.00	1.00	2,419.73	0.00	851.82	177.39	0.00	1,390.52	4,013.97
2026	46.40	244.05	23.39	160.60	85.00	1.00	2,148.53	0.00	841.27	157.51	0.00	1,149.75	5,163.71
2027	40.93	212.63	20.74	141.40	85.00	1.00	1,904.67	0.00	818.78	139.60	0.00	946.29	6,110.01
2028	33.83	164.27	16.81	108.30	85.00	1.00	1,536.87	0.00	636.14	112.47	0.00	788.26	6,898.27
2029	28.90	135.42	14.21	88.23	85.00	1.00	1,296.08	0.00	542.20	94.76	0.00	659.12	7,557.39
2030	23.86	115.23	11.66	74.55	85.00	1.00	1,065.34	0.00	422.91	77.95	0.00	564.48	8,121.87
2031	21.17	104.56	10.30	67.57	85.00	1.00	943.11	0.00	385.00	69.05	0.00	489.06	8,610.93
2032	19.56	97.31	9.55	62.77	85.00	1.00	874.23	0.00	385.00	64.01	0.00	425.21	9,036.14
2033	18.00	90.29	8.81	58.13	85.00	1.00	807.33	0.00	385.00	59.12	0.00	363.21	9,399.35
2034	16.63	84.20	8.17	54.10	85.00	1.00	748.73	0.00	384.82	54.83	0.00	309.08	9,708.43
2035	15.29	78.37	7.55	50.33	85.00	1.00	692.08	0.00	381.11	50.69	0.00	260.27	9,968.70
2036	14.17	73.16	7.03	47.00	85.00	1.00	644.24	0.00	379.26	47.19	0.00	217.79	10,186.49
2037	11.32	46.66	5.78	28.50	85.00	1.00	519.72	0.00	303.35	37.79	0.00	178.57	10,365.06

Rem.	50.33	272.35	25.71	172.89	85.00	1.00	2,358.21	0.00	1,490.02	172.78	0.00	695.41	695.41
Total	36.6	487.62	242.92	1,599.50	85.00	1.00	22,247.95	0.00	9,558.40	1,629.08	0.00	11,060.47	11,060.47
Ult.	3,864.79	20,259.61											

Eco. Indicators

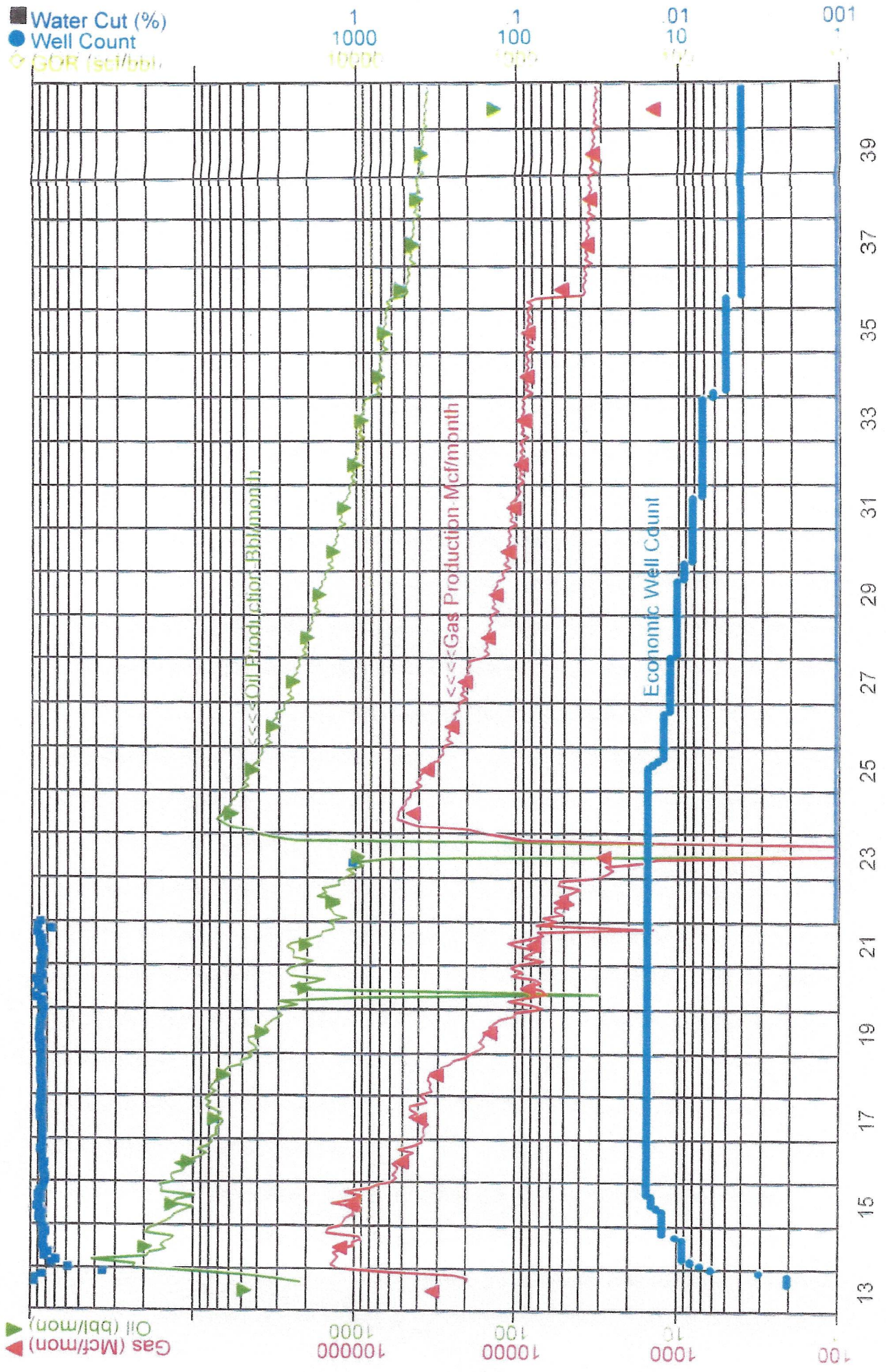
Return on Investment (disc) : 0.000
Return on Investment (undisc) : 0.000
Years to Payout : 0.00
Internal Rate of Return (%) : 0.00

Present Worth Profile (M\$)

PW 5.00% :	8,727.07	PW 40.00% :	3,835.07
PW 10.00% :	7,243.08	PW 50.00% :	3,380.89
PW 15.00% :	6,224.43	PW 60.00% :	3,043.74
PW 20.00% :	5,484.41	PW 70.00% :	2,782.92
PW 30.00% :	4,482.58	PW 100.00% :	2,262.13

Operator: Buffalo Creek Operating
County/State: Madison, TX

Field: Ft. Trinidad
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Date : 10/03/2023 2:42:43PM
Partner : All Cases

ECONOMIC SUMMARY PROJECTION

Proved Non-Producing Resv. Class & Category
BUFFALO XXII OPERATING, LLC Operator

Buffalo XXII Operating, LLC

All Cases

Discount Rate : 0.00

As of : 07/01/2023

Est. Cum Oil (Mbbbl) : 815.99
Est. Cum Gas (MMcf) : 4,633.84
Est. Cum Water (Mbbbl) : 4,010.87

Year	Oil Gross (Mbbbl)	Gas Gross (MMcf)	Oil Net (Mbbbl)	Gas Net (MMcf)	Oil Price (\$/bbl)	Gas Price (\$/MMcf)	Oil & Gas Rev. Net (M\$)	Misc. Rev. Net (M\$)	Costs Net (M\$)	Taxes Net (M\$)	Invest. Net (M\$)	NonDisc. CF Annual (M\$)	Cum Disc. CF (M\$)
2023	5.65	19.76	4.49	15.76	85.00	1.00	397.71	0.00	41.13	28.74	487.50	-159.66	-159.66
2024	69.97	514.91	55.06	401.94	85.00	1.00	5,081.81	0.00	528.21	373.19	1,000.00	3,180.40	3,020.74
2025	51.90	419.71	40.68	326.80	85.00	1.00	3,784.80	0.00	556.91	278.76	0.00	2,949.11	5,969.88
2026	38.63	294.67	30.22	228.49	85.00	1.00	2,797.14	0.00	471.78	205.63	0.00	2,119.78	8,089.60
2027	29.02	242.08	22.66	187.44	85.00	1.00	2,113.56	0.00	437.21	155.81	0.00	1,520.51	9,610.14
2028	23.81	175.56	18.55	135.07	85.00	1.00	1,712.17	0.00	395.21	125.73	0.00	1,191.28	10,801.37
2029	19.96	151.33	15.53	120.91	85.00	1.00	1,440.62	0.00	386.88	106.00	0.00	947.71	11,749.11
2030	16.37	133.17	12.70	102.04	85.00	1.00	1,181.50	0.00	320.76	87.02	0.00	773.72	12,522.83
2031	14.07	122.62	10.89	93.77	85.00	1.00	1,019.16	0.00	299.02	75.23	0.00	644.90	13,167.74
2032	12.15	110.87	9.38	84.52	85.00	1.00	881.56	0.00	269.21	65.18	0.00	547.17	13,714.90
2033	10.91	107.35	8.40	81.78	85.00	1.00	795.97	0.00	269.21	59.01	0.00	467.74	14,182.65
2034	8.57	101.19	6.55	76.89	85.00	1.00	633.51	0.00	190.44	47.32	0.00	395.75	14,578.41
2035	7.87	99.70	6.01	75.72	85.00	1.00	586.42	0.00	185.21	43.93	0.00	357.28	14,935.68
2036	6.21	61.93	4.75	47.34	85.00	1.00	451.47	0.00	156.31	33.50	0.00	261.65	15,197.35
2037	5.26	42.95	4.03	33.06	85.00	1.00	375.53	0.00	143.21	27.68	0.00	204.64	15,401.99

Rem.	63.57	644.14	48.83	497.32	85.00	1.00	4,648.14	0.00	2,398.45	345.19	0.00	1,904.51	1,904.51
Total	50.0	383.92	298.73	2,508.85	85.00	1.00	27,901.07	0.00	7,049.16	2,057.92	1,487.50	17,306.49	17,306.49

Ult. 1,199.92 7,881.80

Eco. Indicators

Return on Investment (disc) : 12.635
Return on Investment (undisc) : 12.635
Years to Payout : 0.82
Internal Rate of Return (%) : >1000

Present Worth Profile (M\$)

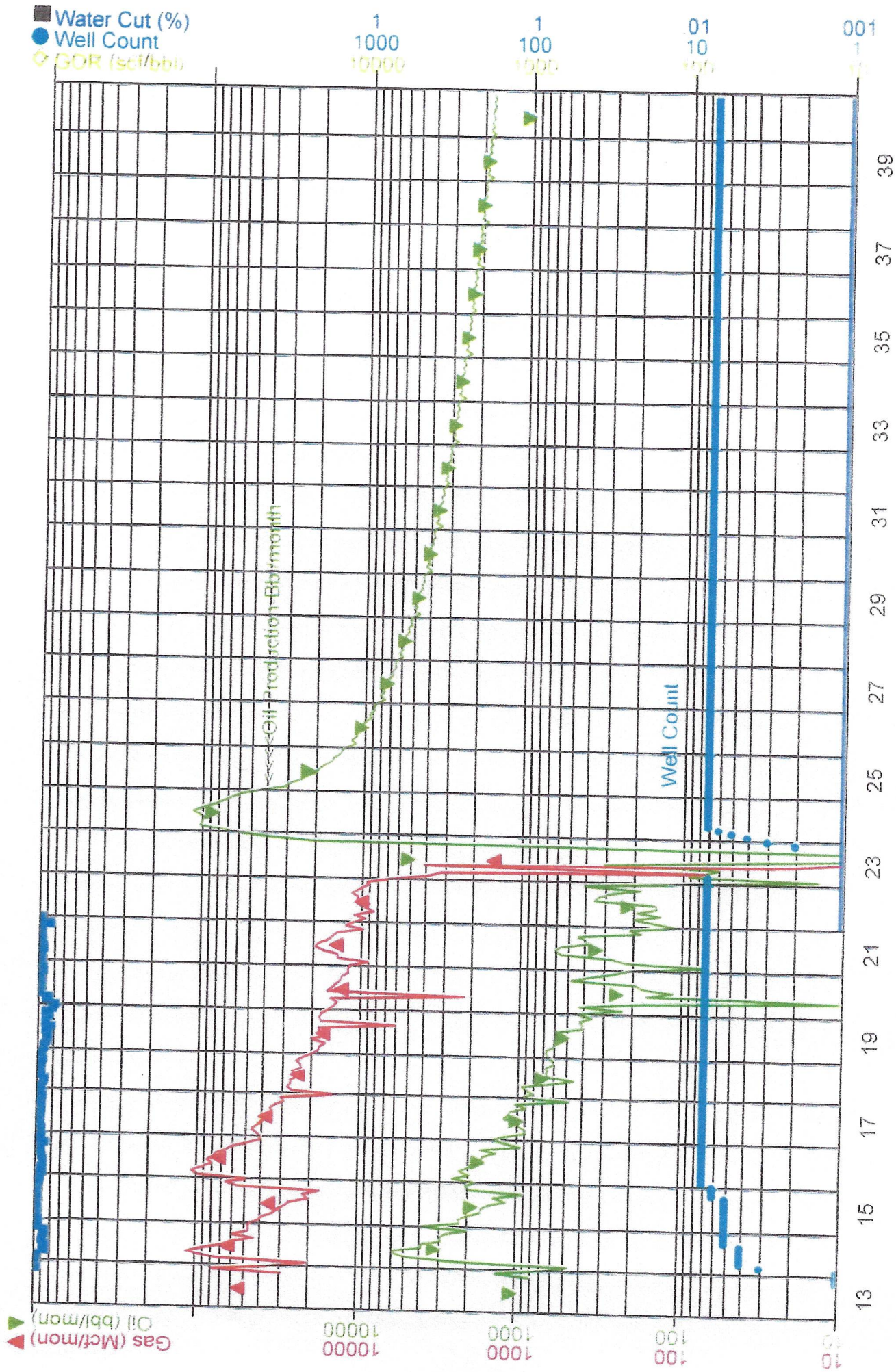
PW 5.00% :	13,185.11	PW 40.00% :	5,270.02
PW 10.00% :	10,792.28	PW 50.00% :	4,490.47
PW 15.00% :	9,176.76	PW 60.00% :	3,903.38
PW 20.00% :	7,994.00	PW 70.00% :	3,445.03
PW 30.00% :	6,357.99	PW 100.00% :	2,524.00

Operator: Buffalo XXII Operating

Field: Ft Trinidad

API Formatted:

County/State: Madison, TX



Date : 10/03/2023 2:42:43PM
Partner : All Cases

ECONOMIC SUMMARY PROJECTION

Buffalo XXII Operating, LLC

Probable Undeveloped Rsv Class & Category
BUFFALO XXII OPERATING LLC Operator

All Cases

Discount Rate : 0.00

As of : 07/01/2023

Est. Cum Oil (Mbbbl) : 119.69
Est. Cum Gas (MMcf) : 3,525.95
Est. Cum Water (Mbbbl) : 1,353.85

Year	Oil Gross (Mbbbl)	Gas Gross (MMcf)	Oil Net (Mbbbl)	Gas Net (MMcf)	Oil Price (\$/bbl)	Gas Price (\$/Mcf)	Oil & Gas Rev. Net (M\$)	Misc. Rev. Net (M\$)	Costs Net (M\$)	Taxes Net (M\$)	Invest. Net (M\$)	NonDisc. CF Annual (M\$)	Cum Disc. CF (M\$)
2023	60.56	0.00	47.13	0.00	85.00	0.00	4,006.27	0.00	40.50	284.53	6,900.00	-3,218.76	-3,218.76
2024	1,023.26	0.00	793.69	0.00	85.00	0.00	67,463.71	0.00	314.75	4,796.37	9,181.75	53,170.84	49,952.08
2025	266.21	0.00	208.33	0.00	85.00	0.00	17,708.11	0.00	377.57	1,258.97	0.00	16,071.57	66,023.65
2026	124.24	0.00	96.77	0.00	85.00	0.00	8,225.58	0.00	377.57	584.80	0.00	7,263.21	73,286.86
2027	86.52	0.00	67.34	0.00	85.00	0.00	5,723.78	0.00	377.57	406.94	0.00	4,939.27	78,226.13
2028	67.64	0.00	52.63	0.00	85.00	0.00	4,473.47	0.00	377.57	318.04	0.00	3,777.85	82,003.98
2029	55.75	0.00	43.37	0.00	85.00	0.00	3,686.36	0.00	377.57	262.08	0.00	3,046.70	85,050.69
2030	47.77	0.00	37.16	0.00	85.00	0.00	3,158.30	0.00	377.57	224.54	0.00	2,556.18	87,606.87
2031	41.94	0.00	32.62	0.00	85.00	0.00	2,772.71	0.00	377.57	197.13	0.00	2,198.01	89,804.88
2032	37.58	0.00	29.23	0.00	85.00	0.00	2,484.13	0.00	377.57	176.61	0.00	1,929.95	91,734.84
2033	33.94	0.00	26.39	0.00	85.00	0.00	2,243.45	0.00	377.57	159.50	0.00	1,706.38	93,441.22
2034	31.06	0.00	24.16	0.00	85.00	0.00	2,053.51	0.00	377.57	146.00	0.00	1,529.95	94,971.17
2035	28.68	0.00	22.30	0.00	85.00	0.00	1,895.73	0.00	377.57	134.78	0.00	1,383.38	96,354.55
2036	26.73	0.00	20.79	0.00	85.00	0.00	1,767.06	0.00	377.57	125.63	0.00	1,263.86	97,618.41
2037	24.93	0.00	19.39	0.00	85.00	0.00	1,647.81	0.00	377.57	117.15	0.00	1,153.09	98,771.49

Rem.	458.73	0.00	356.71	0.00	85.00	0.00	30,320.52	0.00	12,962.17	2,155.66	0.00	15,202.70	15,202.70
Total	49.3	2,415.52	1,878.01	0.00	85.00	0.00	159,630.52	0.00	18,225.85	11,348.73	16,081.75	113,974.19	113,974.19
Ult.	2,535.21	3,525.95											

Eco. Indicators

Return on Investment (disc) : 8.087
Return on Investment (undisc) : 8.087
Years to Payout : 0.73
Internal Rate of Return (%) : >1000

Present Worth Profile (M\$)

PW 5.00% :	90,741.10	PW 40.00% :	48,940.15
PW 10.00% :	78,521.28	PW 50.00% :	43,972.26
PW 15.00% :	70,380.92	PW 60.00% :	39,975.16
PW 20.00% :	64,282.47	PW 70.00% :	36,669.32
PW 30.00% :	55,370.97	PW 100.00% :	29,411.45