Kurion Cost Estimate for Water Treatment

OPERATION AND MAINTENANCE COSTS			
DESCRIPTION	**QUANTITY**	**UNITS**	**COMMENTS**
Treatment facility electric	780	kW	The WAA facility maximum utility load under normal operating conditions in the winter with process running is 754 kW. The BA1 skid utilizes 25.6 kW of power.
Nitrate system - gas	2.4 Million	BTU/hr	1.2 million BTU/hr needed to raise temperature 20 degrees F at 125 gpm. Two nitrate trains require heating.
IX resin			IX resin cost based on estimated resin consumption
Barite			Barite cost based on estimated resin consumption and biomass generation rate for nitrate train 4.
6M HCl - UIX system pH adjustment	4,422	gal/month	Cost based on 125 gpm per UIX train for WAA and 90 gpm flowrate for BA #1.
Bioreactor - methanol nutrient source	$58,500	Per Month	Injection rate of 11 gallons per hour was calculated for a single 125 gpm train at 155 ppm nitrate. Estimated average influent concentration is less than 80 ppm; need for each of the three treatment trains is approximately half of the 11 gallons per hour.
Spent resin disposal	93	55-gal drums	
Dewatered biomass	6	55-gal drums Per Week	Projection based on three 125 gpm train processing 150 ppm nitrates. Although the influent concentration is less than 80 ppm, used this rate to account for addition of inert material to meet disposal requirements.

Kurion Cost Estimate for Water Treatment

BURIAL AREA #1 TREATMENT FACILITY CAPITAL CONSTRUCTION			
	TOTAL COST	UNIT COST	COMMENTS
One (1) IX system in enclosure	$1,150,000.00	$1,150,000.00	Does not include IX resin vessels.
One (1) 12K gallon influent tank (TK-501)	$44,875.00	$44,875.00	Dual wall vertical tank. Includes full perimeter handrails and caged access ladders.
One (1) 12K gallon effluent tank (TK-801)	$36,850.00	$36,850.00	Single wall vertical tank. Includes full perimeter handrails and caged access ladders.
One (1) 1K gallon acid tank (TK-802)	$5,330.00	$5,330.00	Dual walled HDPE tank.
Four (4) 48-inch IX vessels	$140,000.00	$35,000.00	Estimated fabrication cost per AvanTech.
Chemical addition pump (P-502)	$1,898.00	$1,898.00	Grundfos Model DDC 15-4 quote from PumpTech Inc Moses Lake, WA
Two (2) centrifugal process pumps (P-501 & P-801)	$13,314.00	$6,657.00	Grundfos ModelCRN 20-7 quote from Pump Tech Inc, Moses Lake, WA
Wall mounted 2-ton air conditioner unit skid enclosure	$6,425.00	$6,425.00	Bard 2-Ton Model # W24A2-C06BPSX3E
Site work and foundations	$196,539.67		Included in estimated cost for civil grading, foundations, etc., in Table 16-1.

Kurion Cost Estimate for Water Treatment

WESTERN AREA TREATMENT FACILITY BUILDING - CAPITAL CONSTRUCTION COST			
	TOTAL COST	UNIT COST	COMMENTS
Pre-engineered building	$391,769.58		Includes mezzanine for resin handling equipment and allowance for mechanical installation
Site Work and Foundations	$2,974,001.91		Includes foundation and slab for pre-engineered building. Included in estimated cost for civil grading, foundations, etc., in Table 16-1. Table 16-1 includes $30,450 estimate by Burns & McDonald for septic systems
Electrical Equipment and Installation	$176,560.00	$176,560.00	Switchboards, motor control centers, power panels, dry type transformer, Luminiares, receptacles, conduits and installation.
Two (2) heaters for building	$3,282.00	$1,641.00	Electric Heater Model Dayton 2YU73, 51,200 BTU/hr
Two (2) exhaust fans	$5,200.00	$2,600.00	Budgetary quote for Greencheck Model SE2-36-614-B30, 13,767 CFM
Five (5) vent louvers	$7,175.00	$1,435.00	Budgetary quote for Greencheck Model EDS-435, 52" Wide X 66" Height & Filter Rack
One (1) heat pump with split air handling unit for office & conference room	$5,900.00	$5,900.00	Quote for Trane 6 Ton Split HP Unit Model TWA073D30RA
One (1) wall mounted A/C unit	$759.00	$759.00	Frigidaire FFRH1822R2
Five (5) eye wash stations	$2,755.00	$551.00	Haws Model 7261-7271

Kurion Cost Estimate for Water Treatment

WESTERN AREA WATER TREATMENT UNITS - CAPITAL CONSTRUCTION COST			
	TOTAL COST	UNIT COST	COMMENTS
Three (3) IX systems	$2,100,000.00	$700,000.00	Does not include IX columns.
Twelve (12) : 48-Inch IX Vessels	$420,000.00	$35,000.00	Estimated fabrication cost per AvanTech.
Three (3) Biodenitrification Systems	$4,300,000.00		Estimated fabrication cost per AvanTech. Includes transfer pumps, bioreactors, bioreactor blowers, chemical injection systems, 2 dual media filters, backwash tank and pumps, sludge dewatering system, 125 gpm gas fired heater - $1,900,000. Nitrate Train 2 will have single bioreactor without heating: estimate $1,050,000 Nitrate Train 3 will have single bioreactor wth heating: estimate $1,350,000

Kurion Cost Estimate for Water Treatment

WESTERN AREA RESIN PROCESSING EQUIPMENT - CAPITAL CONSTRUCTION COST			
	TOTAL COST	UNIT COST	COMMENTS
Scrolling Centrifuge	$221,500.00	$221,500.00	PENNWALT Super-D-Canter centrifuge (PM 30000)
Sack Unloader	$43,425.00	$43,425.00	Floor hopper, dust collection system, FLEXICON conveyor, bulk bag discharger
Air Compressor	$2,953.00	$2,953.00	Ingersoll Rand Model 2475D5-P with 80-gallon horizontal tank
Ribbon Blender	$105,422.00	$105,422.00	Ross 42N-80 ribbon blender (80 cu.ft maximum working capacity) with VFD and mounting option.
Screw Conveyor	$15,000.00	$15,000.00	Interface between centrifuge and ribbon blender - 6-inch unit
Miscellaneous Resin Handling Tanks	$14,750.00	NA	Quote for 550-gallon sluice water tank (TK-703), 550-gallon excess water tank (TK-704), and 150-gallon vessel refill tank (TK-702)
Drum Dumper	$31,200.00	$31,200.00	Flexicon quote 2015/1701-DFS32 Open Chute High Lift Drum Dumper SD-DP-06, 10 feet lift

Kurion Cost Estimate for Water Treatment

WESTERN AREA TANKS, PUMPS, ETC. - CAPITAL CONSTRUCTION COST			
	TOTAL COST	UNIT COST	COMMENTS
Four (4) 12K gallons Influent Tanks	$179,500.00	$44,875.00	Dual wall vertical tank. Includes full perimeter handrails and caged access ladders.
One (1) 30K gallons Effluent Tank	$70,075.00	$70,075.00	Single wall vertical tank. Includes full perimeter handrails and caged access ladders.
One (1) 5K gallons Acid Tank	$21,840.00	$21,840.00	Dual wall HDPE tank
4-Centrifugal Process Pumps (P-101, P-201, P-301& P-701)	$26,628.00	$6,657.00	Grundfos Model CRN 20-7 quote from Pump Tech Inc, Moses Lake, WA
Diaphragm Pumps (P-702 & P-705)	$5,215.00	$2,950.00	Quote from Edson International. Electric diaphragm pump model 120EWA-40-200.
Centrifugal Pumps (P-703 & P-704)	$6,394.00	$3,197.00	Grundfos CRN 10-4 quote from Pump Tech Inc, Moses Lake, WA
3-Chemical addition Pumps (P-102, P-202, & P-302)	$5,694.00	$1,898.00	Grundfos Model DDC 15-4 quote from Pump Tech Inc, Moses Lake, WA

60% Design
Cimarron Environmental Response Trust
Cimarron Remediation
84237
Cimarron City, OK

	AREA / DISCIPLINE	Direct MHRS	Approx Subcon MHRS	Labor Cost	Material Cost	Engr Equip/ Subcontract Cost	Construction Equipment Cost	**Total Cost**
	CIVIL	36,799		$2,643,270	$2,301,363	$1,348,786	$942,984	$7,236,403
	CONTROL SHED	86		$5,502	$10,711	$7,714	$1,396	$25,323
	TREATMENT FACILITIES					$12,953,664		$12,953,664
	ELECTRICAL	13,720		$923,444	$1,300,980			$2,224,424
	Total Direct Cost	**50,605**		**$3,572,216**	**$3,613,053**	**$14,310,164**	**$944,380**	**$22,440,000**

Rev.	**Revision Date**			
0		General Conditions / CM	25%	$5,610,000
		Engineering	10%	$2,244,000
		Bonds & Permits	1%	$224,400
		Taxes - Included		
		Escalation - Excluded		
		Total Indirect Cost		**$8,080,000**
		Total Direct and Indirect Costs		**$30,520,000**
		Total Project Cost		**$30,520,000**

PROJECT CLIENT **Cimarron Environmental Response Trust**

PROJECT DESC: **Cimarron Remediation**

PROJECT # : **84237**

SUMMARY

CIVIL

EST LEVEL: **60%**

ESTIMATE DUE DATE: **12/22/2015**

ESTIMATOR: **SRH**

DESCRIPTION	LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
P 3 SITE WORK	2,347	147,607	325,176	130,428	96,440	**699,651**
P 4 HDPE PIPING, PUMPS & WELLS	27,355	1,981,576	1,536,023	973,938	687,339	**5,178,876**
P 5 HDPE PIPING, PUMPS & WELLS	7,097	514,087	440,163	244,421	159,205	**1,357,876**
ESTIMATE TOTALS	**36,799**	**$2,643,270**	**$2,301,363**	**$1,348,786**	**$942,984**	**$7,236,403**

PROJECT CLIENT **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # : **84237**

SUMMARY

CIVIL

EST LEVEL: **60%**
ESTIMATE DUE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION		LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
MARK-UP SETTINGS							
WORKING CONDIT. FACTOR	1.10000	1.10000	NA	NA	NA	1.10000	
SUBTOTALS			NA	NA	NA	1.10000	
SALES TAX	1.08375		NA	1.08375	NA	1.08375	
SUBTOTALS			NA	1.08375	NA	1.19213	
FIELD OVERHEAD	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.10000	1.19213	NA	1.31134	
HOME OFFICE COSTS	1.03000		1.03000	1.03000	NA	1.03000	
SUBTOTALS			1.13300	1.22789	NA	1.35068	
SUB-CONTR. PROFIT	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.24630	1.35068	NA	1.48575	
BOND	1.01500		1.01500	1.01500	1.01500	1.01500	
SUBTOTALS			1.26499	1.37094	1.01500	1.50803	
ESCALATION	1.00000		1.00000	1.00000	1.00000	1.00000	
SUBTOTALS			1.26499	1.37094	1.01500	1.50803	
CONTINGENCY	1.00000		1.00000	1.00000	1.00000	1.00000	
CTP SUBTOTAL MARKUP MULTIPLIERS			1.26499	1.37094	1.01500	1.50803	
G . C. O & P ON S/C WORK	1.00000		1.00000	1.00000	1.00000	1.00000	
TOTAL MARKUP MULTIPLIERS		1.10000	1.26499	1.37094	1.01500	1.50803	

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
CIVIL

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	**TOTAL COST**
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
SITE WORK														
Mob/Demob	1	ls							15225.00	15,225			15225.00	**15,225**
Survey Layout Allowance	10	day	35.2	352	57.56	20,260					107.82	1,078	2133.84	**21,338**
Clear & Grub at Buildings/Sheds (light clearing)	21	ac	13.2	277	57.56	15,955					2262.05	47,503	3021.80	**63,458**
Erosion Control Wattles	23100	lf	0.011	254	57.56	14,625	4.11	95,006			0.15	3,484	4.90	**113,115**
Rock Check Dams	5	ea	4.4	22	57.56	1,266	1370.94	6,855			120.64	603	1744.83	**8,724**
Seed, Mulch, Fertilize	20	ac							3045.00	60,900			3045.00	**60,900**
Gravel Access Road	4223	sy	0.022	93	57.56	5,347	14.94	63,105			2.26	9,553	18.47	**78,005**
- Earthwork (Cut to Fill)	1500	cy	0.088	132	57.56	7,598					3.02	4,524	8.08	**12,122**
Access Road Improvements - 6" Agg Overlay	4400	sy	0.0187	82	57.56	4,736	9.60	42,225			1.96	8,626	12.63	**55,587**
Rip Rap	341	cy	0.33	113	57.56	6,477	47.98	16,362			17.19	5,862	84.17	**28,701**
- Earthwork (Cut to Fill)	341	cy	0.088	30	57.56	1,727					3.02	1,028	8.08	**2,756**
Pipe Bollards	92	ea	1.65	152	57.56	8,737	822.56	75,676			22.62	2,081	940.15	**86,494**
Western Area RTU Cabinet Platform & Foundations	1	ls							20300.00	20,300			20300.00	**20,300**
2" HDPE Water Supply Tubing	1800	lf	0.088	158	72.44	11,474	2.29	4,121			1.27	2,280	9.93	**17,876**
6" HDPE Fire Protection Pipe - SDR 17	1900	lf	0.22	418	72.44	30,280	7.61	14,457			3.17	6,017	26.71	**50,753**
4" HDPE - Gas Pipe	1600	lf	0.165	264	72.44	19,124	4.61	7,370			2.38	3,800	18.93	**30,295**
Valve Vault - Precast 4'x2'x2'	2	ea							3552.50	7,105			3552.50	**7,105**
Fire Hydrant System	1	ea							6597.50	6,598			6597.50	**6,598**
Propane Tank Foundations / Infrastructure	1	ls							20300.00	20,300			20300.00	**20,300**
TOTALS				2,347		147,607		325,176		130,428		96,440		**699,651**

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
CIVIL

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	TOTAL COST
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
HDPE PIPING, PUMPS & WELLS														
Injection System														
2" HDPE - SDR 17	10296	lf	0.088	906	72.44	65,634	2.29	23,572			1.27	13,042	9.93	**102,249**
2" HDPE Deep Injection Well - 70 ft w/ Filter & Seal	2	ea	34.881	70	72.44	5,054	2475.91	4,952			502.11	1,004	5504.80	**11,010**
2" HDPE Shallow Injection Well - 30 ft w/ Filter & Seal	11	ea	14.949	164	72.44	11,912	1061.11	11,672			215.19	2,367	2359.20	**25,951**
Vaults	11	ea							2537.50	27,913			2537.50	**27,913**
Injection Trench														
- Excavation to 25' - benched/sloped sides	48592.6	cy	0.22	10,690	72.44	774,409					6.03	293,117	21.97	**1,067,526**
- Backfill w/ Aggregate for 15' Depth	20148.1	cy	0.132	2,660	72.44	192,658	47.98	966,765			3.77	75,960	61.31	**1,235,383**
- Backfill w/ Soil for 10' Depth	28444.4	cy	0.132	3,755	72.44	271,988					3.77	107,238	13.33	**379,226**
- Geotextile	1777.78	sy							5.08	9,022			5.08	**9,022**
HDPE Valves, Cleanouts, and Fittings Allowance	1	ls			72.44				20300.00	20,300			20300.00	**20,300**
Western Area Injection System	1	ls	222.07	222	72.44	16,087	76673.05	76,673			3044.50	3,045	95804.62	**95,805**
Burial Area 1 Injection System	1	ls	193.14	193	72.44	13,991	61085.01	61,085			2647.77	2,648	77723.52	**77,724**
- Enclosure	240	sf							65.98	15,834			65.98	**15,834**
Geomembrane- 60 Mil HDPE	1561	sy	0.1485	232	72.44	16,792	7.40	11,556					18.16	**28,348**
Groundwater Collection System														
6" HDPE - SDR 17	1518	lf	0.22	334	72.44	24,192	7.61	11,550			3.17	4,807	26.71	**40,549**
4" HDPE - SDR 17	8798	lf	0.165	1,452	72.44	105,159	4.61	40,527			2.38	20,897	18.93	**166,582**
3" HDPE - SDR 17	3084	lf	0.132	407	72.44	29,489	2.76	8,498			1.90	5,860	14.22	**43,848**
2" HDPE - SDR 17	4840	lf	0.088	426	72.44	30,854	2.29	11,081			1.27	6,131	9.93	**48,066**
Groundwater Extraction Trench - 4" HDPE Perforate Pipe	1000	lf	0.165	165	72.44	11,953	5.98	5,977			2.38	2,375	20.31	**20,305**
- Excavation to 25' - benched/sloped sides	15185.2	cy	0.242	3,675	72.44	266,203					6.03	91,599	23.56	**357,802**
- Backfill w/ Aggregate for 22' Depth	6296.3	cy	0.132	831	72.44	60,206	47.98	302,114			3.77	23,738	61.31	**386,057**
- Backfill w/ Soil for 3' Depth	8888.89	cy	0.132	1,173	72.44	84,996					3.77	33,512	13.33	**118,508**
- Geotextile	1111.11	sy							5.08	5,639			5.08	**5,639**
Groundwater Extraction Wells, Pump Assembly, &	40	ea							17052.00	682,080			17052.00	**682,080**
Control Vaults - Instrumentation w/ Electrical	40	ea							4821.25	192,850			4821.25	**192,850**
HDPE Valves, Cleanouts, and Fittings Allowance	1	ls							20300.00	20,300			20300.00	**20,300**
TOTALS				27,355		1,981,576		1,536,023		973,938		687,339		**5,178,876**

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
CIVIL

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	TOTAL COST
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
HDPE PIPING, PUMPS & WELLS														
Compressed Air HDPE - 1"	350	lf	0.077	27	72.44	1,952	1.08	379			1.11	388	7.77	**2,719**
West Outfall Pipe - 8" HDPE - SDR 17	2800	lf	0.275	770	72.44	55,779	19.06	53,357			3.96	11,084	42.94	**120,220**
East Outfall Pipe - 4" HDPE - SDR 17	1700	lf	0.165	281	72.44	20,319	4.61	7,831			2.38	4,038	18.93	**32,188**
Tracer Wire	1200	lf	0.022	26	72.44	1,912	0.40	476					1.99	**2,389**
Tracere Wire Test Station	2	ea	8.8	18	72.44	1,275	137.03	274					774.50	**1,549**
Detection Tape	500	clf	0.0627	31	72.44	2,271	37.70	18,850					42.24	**21,121**
Clean Out Assembly w/ vault	45	ls	4.4	198	72.44	14,343	68.48	3,082	3552.50	159,863	60.32	2,714	4000.04	**180,002**
36" HDPE Stormwater Pipe	64	lf	0.176	11	72.44	816	52.10	3,334	30.45	1,949	3.62	232	98.91	**6,331**
Pressure Testing for Forcemain Pipe	10	ea	70.4	704	72.44	50,998	70.60	706					5170.37	**51,704**
Cimarron River NPDES Outfall Structure - Conc Headwall &	2	ea			72.44				15225.00	30,450			15225.00	**30,450**
Air Release Valves	1	ls							30450.00	30,450			30450.00	**30,450**
Pipe & Conduit Combined Trench														
** 22,100 LF of Trench **														
Excavation	15555.6	cy	0.165	2,567	72.44	185,929					4.52	70,375	16.48	**256,304**
Bedding	8555.56	cy	0.132	1,129	72.44	81,809	41.13	351,874			3.77	32,255	54.46	**465,938**
Backfill w/ Compaction	8555.56	cy	0.132	1,129	72.44	81,809			2.54	21,710	3.77	32,255	15.87	**135,774**
- Respread Spoils	1555.56	cy	0.132	205	72.44	14,874					3.77	5,865	13.33	**20,739**
TOTALS				7,097		514,087		440,163		244,421		159,205		**1,357,876**

PROJECT CLIENT **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # : **84237**

SUMMARY

CONTROL SHED

EST LEVEL: **60%**
ESTIMATE DUE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
P 3 Control Shed (10'x10')	86	5,502	10,711	7,714	1,396	**25,323**
ESTIMATE TOTALS	**86**	**$5,502**	**$10,711**	**$7,714**	**$1,396**	**$25,323**

PROJECT CLIENT **Cimarron Environmental Response Trust**

PROJECT DESC: **Cimarron Remediation**

PROJECT # : **84237**

SUMMARY

CONTROL SHED

EST LEVEL: **60%**

ESTIMATE DUE DATE: **12/22/2015**

ESTIMATOR: **SRH**

DESCRIPTION		LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
MARK-UP SETTINGS							
WORKING CONDIT. FACTOR	1.10000	1.10000	NA	NA	NA	1.10000	
SUBTOTALS			NA	NA	NA	1.10000	
SALES TAX	1.08375		NA	1.08375	NA	1.08375	
SUBTOTALS			NA	1.08375	NA	1.19213	
FIELD OVERHEAD	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.10000	1.19213	NA	1.31134	
HOME OFFICE COSTS	1.03000		1.03000	1.03000	NA	1.03000	
SUBTOTALS			1.13300	1.22789	NA	1.35068	
SUB-CONTR. PROFIT	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.24630	1.35068	NA	1.48575	
BOND	1.01500		1.01500	1.01500	1.01500	1.01500	
SUBTOTALS			1.26499	1.37094	1.01500	1.50803	
ESCALATION	1.00000		1.00000	1.00000	1.00000	1.00000	
SUBTOTALS			1.26499	1.37094	1.01500	1.50803	
CONTINGENCY	1.00000		1.00000	1.00000	1.00000	1.00000	
CTP SUBTOTAL MARKUP MULTIPLIERS			1.26499	1.37094	1.01500	1.50803	
G . C. O & P ON S/C WORK	1.00000		1.00000	1.00000	1.00000	1.00000	
TOTAL MARKUP MULTIPLIERS		1.10000	1.26499	1.37094	1.01500	1.50803	

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
CONTROL SHED

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	**TOTAL COST**
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
Control Shed (10'x10')														
Pre-Engineered Metal Building	100	sf	0.2013	20	63.81	1,284	16.45	1,645			5.43	543	34.72	**3,472**
-Includes Primary & Secondary Framing														
-10' Eave Height														
Metal Wall Panels	400	sf	0.0495	20	63.81	1,263	6.85	2,742			0.68	271	10.69	**4,277**
R-13 Vinyl Faced Batt Insulation	400	sf	0.011	4	63.81	281	0.58	230			0.15	60	1.43	**571**
Metal Liner Panels	400	sf	0.033	13	63.81	842	4.11	1,645			0.45	181	6.67	**2,668**
Standing Seam Metal Roof	100	sf	0.0495	5	63.81	316	8.91	891			0.68	68	12.75	**1,275**
R-19 Vinyl Faced Batt Insulation	100	sf	0.022	2	63.81	140	0.75	75			0.30	30	2.46	**246**
Gutters	40	lf	0.055	2	63.81	140	9.19	367			0.75	30	13.45	**538**
Downspouts	40	lf	0.0682	3	63.81	174	4.74	190			0.93	37	10.03	**401**
Splash Blocks	4	ea	0.1375	1	63.81	35	47.98	192			1.89	8	58.64	**235**
3070 HM Frames	1	ea	1.65	2	63.81	105	292.01	292					397.29	**397**
3070 HM Doors- Insulated, Narrow Light	1	ea	1.65	2	63.81	105	811.60	812					916.88	**917**
Standard Hardware, Lock / Latch Sets	1	ea	3.3	3	63.81	211	527.81	528					738.37	**738**
Closers	1	ea	2.2	2	63.81	140	387.88	388					528.25	**528**
Sealed Concret Floors	100	sf	0.066	7	63.81	421	2.06	206			0.90	90	7.17	**717**
HVAC	100	sf							25.38	2,538			25.38	**2,538**
Concrete Foundation/Slab	100	sf							30.45	3,045			30.45	**3,045**
Building Electrical	100	sf							21.32	2,132			21.32	**2,132**
Gravel Driveway	34	sy	0.022	1	57.56	43	14.94	508			2.26	77	18.47	**628**
TOTALS				86		5,502		10,711		7,714		1,396		**25,323**

PROJECT CLIENT **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # : **84237**

SUMMARY

TREATMENT FACILITIES

EST LEVEL: **60%**
ESTIMATE DUE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
P 3 Treatment Facilities				12,953,664		**12,953,664**
ESTIMATE TOTALS				**$12,953,664**		**$12,953,664**

PROJECT CLIENT **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # : **84237**

SUMMARY

TREATMENT FACILITIES

EST LEVEL: **60%**
ESTIMATE DUE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION		LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
MARK-UP SETTINGS							
WORKING CONDIT. FACTOR	1.00000	1.00000	NA	NA	NA	1.00000	
SUBTOTALS			NA	NA	NA	1.00000	
SALES TAX	1.08375		NA	1.08375	NA	1.08375	
SUBTOTALS			NA	1.08375	NA	1.08375	
FIELD OVERHEAD	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.10000	1.19213	NA	1.19213	
HOME OFFICE COSTS	1.03000		1.03000	1.03000	NA	1.03000	
SUBTOTALS			1.13300	1.22789	NA	1.22789	
SUB-CONTR. PROFIT	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.24630	1.35068	NA	1.35068	
BOND	1.01500		1.01500	1.01500	1.01500	1.01500	
SUBTOTALS			1.26499	1.37094	1.01500	1.37094	
ESCALATION	1.00000		1.00000	1.00000	1.00000	1.00000	
SUBTOTALS			1.26499	1.37094	1.01500	1.37094	
CONTINGENCY	1.00000		1.00000	1.00000	1.00000	1.00000	
CTP SUBTOTAL MARKUP MULTIPLIERS			1.26499	1.37094	1.01500	1.37094	
G . C. O & P ON S/C WORK	1.00000		1.00000	1.00000	1.00000	1.00000	
TOTAL MARKUP MULTIPLIERS		1.00000	1.26499	1.37094	1.01500	1.37094	

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
TREATMENT FACILITIES

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **SRH**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	TOTAL COST
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
Treatment Facilities														
East Facility														
Kurion Quote - includes all costs associated with	1	ls							1619160.15	1,619,160			1619160.15	**1,619,160**
this facility														
West Facility														
Kurion Quote - includes all costs associated with	1	ls							11304053.47	11,304,053			11304053.47	**11,304,053**
this facility														
Septic System Allowance	1	ls							30450.00	30,450			30450.00	**30,450**
TOTALS										12,953,664				**12,953,664**

PROJECT CLIENT **Cimarron Environmental Response Trust**

PROJECT DESC: **Cimarron Remediation**

PROJECT # : **84237**

SUMMARY

ELECTRICAL

EST LEVEL: **60%**

ESTIMATE DUE DATE: **12/22/2015**

ESTIMATOR: **GS**

DESCRIPTION	LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
P 3 ELECTRICAL	11,526	733,566	775,104			**1,508,670**
P 4 ELECTRICAL	2,193	189,878	525,876			**715,754**
ESTIMATE TOTALS	**13,720**	**$923,444**	**$1,300,980**			**$2,224,424**

PROJECT CLIENT **Cimarron Environmental Response Trust**

PROJECT DESC: **Cimarron Remediation**

PROJECT # : **84237**

SUMMARY

ELECTRICAL

EST LEVEL: **60%**

ESTIMATE DUE DATE: **12/22/2015**

ESTIMATOR: **GS**

DESCRIPTION		LABOR MH	LABOR COST	MATERIAL COST	SUBCON COST	EQUIPMENT RENT COST	**TOTAL COST**
MARK-UP SETTINGS							
WORKING CONDIT. FACTOR	1.00000	1.00000	NA	NA	NA	1.00000	
SUBTOTALS			NA	NA	NA	1.00000	
SALES TAX	1.08375		NA	1.08375	NA	1.08375	
SUBTOTALS			NA	1.08375	NA	1.08375	
FIELD OVERHEAD	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.10000	1.19213	NA	1.19213	
HOME OFFICE COSTS	1.03000		1.03000	1.03000	NA	1.03000	
SUBTOTALS			1.13300	1.22789	NA	1.22789	
SUB-CONTR. PROFIT	1.10000		1.10000	1.10000	NA	1.10000	
SUBTOTALS			1.24630	1.35068	NA	1.35068	
BOND	1.01500		1.01500	1.01500	1.01500	1.01500	
SUBTOTALS			1.26499	1.37094	1.01500	1.37094	
ESCALATION	1.00000		1.00000	1.00000	1.00000	1.00000	
SUBTOTALS			1.26499	1.37094	1.01500	1.37094	
CONTINGENCY	1.00000		1.00000	1.00000	1.00000	1.00000	
CTP SUBTOTAL MARKUP MULTIPLIERS			1.26499	1.37094	1.01500	1.37094	
G . C. O & P ON S/C WORK	1.00000		1.00000	1.00000	1.00000	1.00000	
TOTAL MARKUP MULTIPLIERS		1.00000	1.26499	1.37094	1.01500	1.37094	

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
ELECTRICAL

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **GS**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	**TOTAL COST**
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
ELECTRICAL														
ELECTRICAL SERVICE CONNECTION	1	LS	250.65	251	63.64	15,952	56550.95	56,551					72502.55	**72,503**
WESTERN AREA EXTRACTION WELL POWER	1	LS	2898.3	2,898	63.64	184,450	65472.47	65,472					249922.66	**249,923**
WESTERN AREA EXTRACTION INSTRUMENTATION	1	LS	1742.6	1,743	63.64	110,899	113188.90	113,189					224088.17	**224,088**
BURIAL AREA EXTRACTION WELL POWER	1	LS	887.43	887	63.64	56,478	17360.84	17,361					73838.55	**73,839**
BURIAL AREA EXTRACTION INSTRUMENTATION	1	LS	619.39	619	63.64	39,419	49644.58	49,645					89063.84	**89,064**
WELL FIELD AREA EXTRACTION WELL POWER	1	LS	1579.7	1,580	63.64	100,533	40718.92	40,719					141251.76	**141,252**
WELL FIELD AREA EXTRACTION INSTRUMENTATION	1	LS	922.98	923	63.64	58,740	52184.85	52,185					110924.78	**110,925**
INJECTION WELL INSTRUMENTATION	1	LS	1221.1	1,221	63.64	77,710	66125.68	66,126					143835.98	**143,836**
WESTERN AREA INJECTION BUILDING ELECTRICAL	1	LS	430	430	63.64	27,366	119957.06	119,957					147323.06	**147,323**
BURIAL AREA 1 BUILDING ELECTRICAL	1	LS	410	410	63.64	26,093	99392.99	99,393					125486.16	**125,486**
WELL FIELD CONTROL BUILDING ELECTRICAL	1	LS	210	210	63.64	13,365	78828.92	78,829					92193.72	**92,194**
SITE FIBER	1	LS	354.5	354	63.64	22,561	15677.55	15,678					38238.34	**38,238**
TOTALS				11,526		733,566		775,104						**1,508,670**

PROJECT CLIENT: **Cimarron Environmental Response Trust**
PROJECT DESC: **Cimarron Remediation**
PROJECT # **84237**

ESTIMATE DETAIL
ELECTRICAL

EST LEVEL: **60%**
ESTIMATE DATE: **12/22/2015**
ESTIMATOR: **GS**

DESCRIPTION	QTY.	UNIT	LABOR				MATERIAL		SUBCONTRACT		EQUIPMENT RENT		UNIT COST	**TOTAL COST**
			U MH	MH	RATE $/MH	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST	UNIT COST	TTL COST		
ELECTRICAL														
ADDED SCOPE 12/22/15														
WESTERN AREA SERVICE	1	LS	32	32	63.64	2,037	21729.36	21,729					23765.90	**23,766**
WELL FIELD AREA SERVICE	1	LS	63.7	64	63.64	4,054	10282.03	10,282					14336.02	**14,336**
BURIAL AREA 1 SERVICE	1	LS	63.7	64	63.64	4,054	9048.19	9,048					13102.18	**13,102**
FLOW METERS AT EACH WELL SITE	1	LS	147	147	63.64	9,355	100763.93	100,764					110119.28	**110,119**
LEVEL TRANSMITTERS AT EACH WELL SITE	1	LS	117.6	118	63.64	7,484	100763.93	100,764					108248.21	**108,248**
GROUNDING AT EACH WELL SITE	1	LS	483.1	483	63.64	30,745	50288.67	50,289					81034.06	**81,034**
FIBER TO ETHERNET MEDIA CONVERTERS/SWITCHES AT EA	1	LS	106	106	63.64	6,746	108989.55	108,990					115735.59	**115,736**
GROUNDING AT THE BURIAL AREA 1, WELL FIELD CONTROL	1	LS	140.3	140	63.64	8,929	14335.38	14,335					23264.33	**23,264**
INCLUDE WAA-REMOTE PLC CABINET AND PLATFORM	1	LS	240	240	63.64	15,274	95965.65	95,966					111239.69	**111,240**
PLC COMMISSIONING / PROGRAMMING	1	LS	800	800	126.50	101,200	13709.38	13,709					114908.94	**114,909**
TOTALS				2,193		189,878		525,876						**715,754**