

ANALYTICAL LABORATORY REPORT

4/15/75

Lab Group Number

375

Project Engineer:

HJS

U065

Project Number:

H50105

Date Submitted:

3-25-75

Sponsor:

CLEVELAND CLIFF IRON CO (sheet 15 of 19)

Lab. No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton Oil		Sp. Gr.		Gas Loss		% Sphat		Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd								
2998	X-6	800 - 801		1.43		2.19		—		1.06	75.62									
9		799 - 800		2.36		1.61		—		1.85	76.55									
3000		798 - 799		2.17		1.30		—		1.41	77.19									
1		797 - 798		3.59		1.02		—		1.61	75.61									
2		796 - 797		2.82		5.32		—		0.63	76.18									
3		795 - 796		3.44		4.04		—		0.10	76.93									
4		794 - 795		2.73		2.30		—		0.47	77.52									
5		793 - 794		1.89		3.58		—		0.32	77.54									
6		792 - 793		2.75		7.39		—		0.54	75.51									
7		790 - 791		1.46		5.10		—		0.09	77.37									
8		790 - 791		2.41		7.17		—		0.49	75.79									
9		789 - 790		1.92		5.13		—		0.56	76.69									
3010		788 - 789		1.94		2.71		—		0.48	77.68									
1		787 - 788		1.18		5.99		—		0.57	76.67									
2		785 - 786		1.92		7.03		—		0.54	75.99									
3		785 - 786		2.16		8.11		—		0.62	75.40									
4		784 - 785		4.10		4.02		—		0.33	76.38									
5		783 - 784		3.07		6.65		—		0.83	75.36									
6		782 - 783		3.11		8.67		—		0.96	74.52									
7		781 - 782		4.81		6.96		—		0.71	73.88									
8	Duplicate	781 - 782		4.92		9.06		—		0.86	73.64									
9		780 - 781		3.57		10.11		—		1.43	73.24									
3020		779 - 780		3.54		8.81		—		0.86	74.53									
1		778 - 779		4.52		11.24		0.896		0.57	73.35									
3022		777 - 778		4.57		11.24		0.897		1.01	72.87									

These samples both marked 790-791 but they aren't duplicates

BOTH MARKED 785-786

5C- ANALYTICAL LABORATORY REPORT

4/15/75

Lab Group Number

375

Project Engineer

HJS

Project Number

H 50105

Date Submitted

3-25-75

Sponsor

CLEVELAND CLIFFS IRON CO

(sheet 16 of 19)

Lab. No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton Oil		Sp. Gr.		Gas Loss		% Spent		Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd								
3023	X-6	716 - 717		5.20		10.00	—		0.84		93.20									
4		715 - 716		3.57		11.06	0.902		0.61		93.74									
5		714 - 715		4.38		7.41	—		0.74		94.62									
6		713 - 714		3.62		5.62	—		0.78		95.57									
7		712 - 713		3.84		3.95	—		1.10		95.80									
8		711 - 712		3.33		9.33	—		1.32		93.75									
9		710 - 711		2.36		8.95	—		1.23		94.38									
3030		769 - 770		2.02		5.26	—		1.13		96.03									
1		768 - 769		2.13		6.04	—		0.77		96.04									
2		767 - 768		2.64		7.93	—		1.24		94.90									
3		766 - 767		2.30		5.43	—		0.62		96.36									
4		765 - 766		1.55		7.24	—		0.79		95.82									
5		764 - 765		1.90		4.46	—		0.98		96.53									
6		763 - 764		2.09		3.18	—		0.82		97.10									
7		762 - 763		1.89		6.82	—		1.17		95.45									
8		761 - 762		2.02		8.73	—		0.99		94.86									
9	Duplicate	761 - 762		2.41		8.66	—		1.14		94.57									
3040		760 - 761		2.81		15.00	0.921		1.58		91.49									
1		759 - 760		4.62		15.89	0.917		1.32		90.92									
2		623 - 624		1.20		8.90	—		1.12		95.00									
3		622 - 623		1.44		7.45	—		1.27		95.30									
4		621 - 622		1.16		7.06	—		1.03		95.24									
5		620 - 621		1.43		13.12	0.922		1.62		92.75									
6		619 - 620		1.19		12.70	1.722		1.30		93.32									
3047	✓	618 - 619		1.17		3.64	—		1.21		95.52									

Remarks

Supervisor

*[Signature]*

Date Reported

4-10-75

Golden, Colorado

5C- ANALYTICAL LABORATORY REPORT

4/15/75

Lab Group Number

375

Project Engineer:

HJS

Project Number:

H50105

Date Submitted:

3-25-75

Sponsor:

CLEVELAND CLIFFS IRON CO (sheet 17 of 19)

Lab No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton Oil		Sp. Gr.		Gas Loss		70 Spent		Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd								
3048	x-6	617 - 618		1.18		6.79		—		1.28		75.58								
9		616 - 617		1.42		7.24		—		1.42		74.48								
3050		615 - 616		1.66		10.21		—		1.23		74.17								
1		614 - 615		1.42		15.61		0.917		1.43		71.72								
2		613 - 614		1.42		12.93		0.917		2.10		73.42								
3		612 - 613		1.17		16.13		0.917		1.63		71.72								
4		611 - 612		1.41		16.57		0.918		1.50		71.26								
5		610 - 611		1.77		12.52		0.917		1.82		73.64								
6		609 - 610		1.64		11.53		0.925		1.10		73.76								
7		608 - 609		1.91		10.12		0.927		1.35		94.23								
8		607 - 608		8.27		5.14		—		0.41		94.18								
9		606 - 607		7.05		6.42		—		0.61		94.51								
3060	Duplicate	606 - 607		7.19		6.16		—		0.46		94.20								
1		605 - 606		3.55		16.12		0.917		1.31		70.72								
2		604 - 605		2.38		8.71		—		2.85		74.74								↑ JB
3		603 - 604		1.42		10.29		—		1.12		94.38								↓ LD
4		602 - 603		1.18		7.49		—		0.91		95.76								
5		601 - 602				SAMPLE		MISSING												
6		600 - 601		1.46		8.76		—		1.05		95.02								
7		599 - 600		1.18		9.99		—		1.24		74.47								
8		598 - 599		1.62		14.56		0.932		1.60		72.26								
9		597 - 598		1.89		14.79		0.922		1.31		92.21								
3070		596 - 597		1.51		9.16		—		1.04		94.25								
1		595 - 596		1.89		10.38		0.927		0.81		94.37								
3072	Y	594 - 595		1.45		12.09		0.910		1.41		12.16								

Remarks

Supervisor

*[Signature]*

Date Reported

4-10-75

4/15/75

Lab Group Number

315

Project Engineer

HJS

Project Number

H50105

Date Submitted

3-25-75

Sponsor

Cleveland Cliffs Iron Co

(sheet 18 of 19)

Lab. No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton Oil		Sp. Gr.		Gas Loss		Ash									
			Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find
3073	X-6	592 - 594		1.46		12.40		0.927		1.09		93.51								
4		592 - 593		1.89		10.31		—		1.21		94.8								
5		591 - 592		3.25		15.25		0.918		1.19		91.47								
6		590 - 591		1.44		12.16		0.918		1.03		93.71								
7		589 - 590		1.55		11.09		0.930		1.10		92.95								
8		588 - 589		1.43		10.90		0.932		0.74		94.43								
9		587 - 588		1.76		12.75		0.933		1.16		93.26								
3080		586 - 587		1.31		10.36		—		0.53		94.99								
1		585 - 586		1.42		11.23		0.932		0.68		94.36								
2	Duplicate	585 - 586		1.42		11.16		0.931		0.91		94.16								
3		584 - 585		1.20		11.02		0.934		0.93		94.27								
4		583 - 584		1.65		11.14		0.924		0.83		94.19								
5		582 - 583		2.73		15.43		0.914		0.91		92.06								
6		581 - 582		1.31		13.00		0.930		1.05		93.37								
7		580 - 581		1.89		10.16		—		0.48		94.87								
8		579 - 580		1.19		8.69		—		0.66		95.54								
9		578 - 579		1.57		8.61		—		0.72		93.26								
3090		577 - 578		3.13		13.71		0.917		0.67		92.78								
1		576 - 577		1.72		9.73		—		0.82		94.77								
2		575 - 576		1.66		11.75		0.926		0.80		93.97								
3		574 - 575		4.28		15.98		0.915		0.81		91.28								
4		573 - 574		3.10		14.30		0.920		1.19		92.03								
5		572 - 573		1.57		10.94		0.921		0.80		93.15								
6		571 - 572		1.61		9.74		—		—		—								
3097	✓	570 - 571		2.17		11.19		0.92												

No gas loss at 1000°C  
Fines as fine as 100 mesh  
dropped & spilled

Supervisor

Date Reported

4-14-75

4/15/75

Lab Group Number

375

Project Engineer

HJS

Project Number

H50105

Date Submitted

3-25-75

Sponsor

Cleveland Cliffs Iron Co (sheet 19 of 19)

Lab No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton O <sub>2</sub>		Sp. Gr.		Gas Loss		Moisture									
			Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find
3098	X-6	569-570		2.03		10.61		0.919		1.15		93.94								
9		568-569		1.78		21.38		0.916		2.06		87.02								
3100		567-568		1.77		13.06		0.926		1.64		92.46								
1		566-567		1.43		5.62		—		1.06		96.21								
2	Duplicate	565-566		1.66		1.49		—		0.92		97.92								
3		565-566		1.58		1.47		—		1.22		97.57								
4		564-565		1.20		5.79		—		1.50		95.80								
5		563-564		1.68		9.76		—		1.09		94.50								
6		562-563		1.91		14.51		0.913		1.25		92.43								
7		561-562		2.58		32.79		0.912		2.94		93.45								
8		560-561		1.89		11.93		0.917		1.05		93.60								
9		559-560		2.27		10.47		—		0.96		94.12								
3110		558-559		3.13		9.51		—		1.02		94.06								
1		557-558		2.61		10.92		0.920		1.26		93.46								
2		556-557		2.13		9.73		—		1.13		94.29								
3		555-556		2.37		10.07		—		1.13		94.06								
4		554-555		2.41		13.46		0.917		1.07		92.77								
5		553-554		2.37		7.69		—		0.84		95.25								
6		552-553		1.87		6.73		—		0.80		95.85								
7		551-552		2.63		7.71		—		1.20		95.02								
8		550-551		2.39		7.52		—		1.01		95.12								
3119		549-550		2.62		10.32		0.917		1.16		93.75								

Remarks

Supervisor

Date Reported

4-14-75

Golden Colorado

ANALYTICAL LABORATORY REPORT

3/20/75

LAB GROUP

311

Project Engineer

HJS

Project

H50105

Date Submitted

3/11/75

Sponsor

Cleveland Cliffs Iron Co (Sheet 13 of 23) 31

Lab No	Samp No	Description	3/1/75		3/1/75		Sp Gr.		Grain Loss											
			Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find
2	X-4	785 - 786		1.14		1.14		—		1.13										
3		784 - 785		0.97		0.97		0.97		0.77										
4		783 - 784		1.38		1.41		0.922		1.14										
5		783 - 784		1.39		1.22		0.922		0.92										
6	X-6	758 - 759		11.09		6.30		—		0.15										
7		757 - 758		5.95		18.58		0.95		1.31										
8		756 - 757		2.40		20.19		0.915		1.23										
9		755 - 756		2.18		4.26		—		0.40										
10		754 - 755		2.43		5.25		—		0.51										
1		753 - 754		1.93		2.71		—		0.80										
2		752 - 753		1.04		6.45		—		0.59										
3		751 - 752		1.20		13.51		0.919		3.50										
4		750 - 751		1.92		39.98		0.919		3.25										
5		749 - 750		1.67		14.46		0.913		1.58										
6		748 - 749		1.21		7.16		—		1.01										
7		747 - 748		1.44		10.15		—		1.25										
8		746 - 747		1.18		28.38		0.916		2.37										
9		745 - 746		1.93		21.74		0.914		1.79										
10		744 - 745		3.09		6.61		—		1.06										
1		740 - 741		2.00		4.70		—		0.82										
2		739 - 740		2.46		7.13		—		1.31										
3		738 - 739		1.82		9.96		—		1.53										
4		737 - 738		1.45		9.38		—		1.28										
5		736 - 737		1.91		23.61		0.923		2.47										
1016		736 - 737		2.04		23.59		0.921		2.55										

L.D

Remarks

Supervisor

Date Reopened

3-18-75 13117

3/27/75

Lab Group Number

311

Project Engineer:

HJS

Project Number:

H50105

Date Submitted:

3/11/75

Sponsor:

CLEVELAND CLIFFS IRON CO (sheet 14 of 23) 31

Lab. No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton Oil		Sp. Gr.		Gas Loss											
			Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find
1017	X-6	735 - 736		1.81		13.89		0.915		2.17										
8		731 - 732		1.50		20.18		0.908		2.43										
9		730 - 731		1.75		21.44		0.877		2.02										
1020		729 - 730		2.04		32.60		0.898		3.13										
1		728 - 729		2.04		23.87		0.908		*										
2		727 - 728		1.32		23.13		0.908		2.39										
3		726 - 727		1.20		24.85		0.899		1.56										
4		725 - 726		1.72		33.56		0.887		2.32										
5		724 - 725		1.66		35.59		0.899		3.10										
6		723 - 724		1.67		30.84		0.901		2.41										
7		716 - 717		1.23		21.09		0.914		2.33										
8		715 - 716		1.00		16.11		0.914		2.10										
9		714 - 715		1.75		17.42		0.910		2.24										
1030		710 - 711		1.09		32.27		0.897		3.07										
1		709 - 710		1.70		41.47		0.902		3.77										
2		708 - 709		1.33		46.92		0.900		4.03										
3		707 - 708		1.85		36.78		0.907		3.26										
4		706 - 707		1.04		19.62		0.913		2.04										
5		705 - 706		1.32		16.29		0.915		1.77										
6		701 - 702		1.72		18.35		0.920		1.98										
7		701 - 702		1.73		18.74		0.918		1.98										
8		700 - 701		1.70		21.10		0.918		2.11										
9		699 - 700		1.97		49.75		0.907		3.63										
1040		698 - 699		1.72		42.12		0.903		3.35										
1041	V	677 - 698		2.53		18.86		0.901		5.20										

Remarks

Supervisor

Date Reported

3-19-75

Golden, Colorado

ANALYTICAL LABORATORY REPORT

3/27/75

Lab Group Number

311

Project Engineer

HJS

Project Number

H50105

Date Submitted

3/11/75

Sponsor

Cleveland Cliffs Iron Co (sheet 15 of 31)

Lab. No.	Samp. No.	Description	Gal/100 H <sub>2</sub> O		Gal/100 Oil		Sp. Gr.		Gas loss											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
1042	X-6	696 - 697		3.24		22.21		0.898		6.38										
3		695 - 696		2.04		71.12		0.897		5.98										
4		694 - 695		2.19		35.97		0.897		4.19										
5		693 - 694		1.97		38.10		0.901		3.25										
6		686 - 687		2.41		32.61		0.905		2.96										
7		685 - 686		1.23		14.67		0.904		1.32										
8		684 - 685		1.84		12.72		0.906		1.65										
9		680 - 681		1.96		10.11		0.907		1.28										
1050		679 - 680		2.22		14.35		0.902		1.32										
1		678 - 679		1.87		19.04		0.907		2.22										
2		677 - 678		2.32		20.72		0.908		2.29										
3		676 - 677		1.23		11.58		0.912		1.76										
4		675 - 676		1.95		16.71		0.909		1.91										
5		671 - 672		2.44		42.79		0.894		3.34										
6		670 - 671		2.07		26.40		0.904		2.18										
7		669 - 670		2.10		26.09		0.906		2.07										
8	Duplicate	669 - 670		2.10		26.23		0.907		2.28										
9		668 - 669		2.50		31.79		0.909		2.68										
1060		667 - 668		2.73		21.95		0.912		2.41										
1		666 - 667		3.80		13.98		0.903		1.20										
2		659 - 660		2.02		9.83		—		1.13										
3		658 - 659		1.21		2.59		—		0.84										
4		657 - 658		1.50		2.61		—		0.88										
5		656 - 657		1.47		1.50		—		0.77										
1066	V	655 - 656		1.24		2.72		—		0.83										

Remarks

Supervisor

*[Signature]*

Date Reported

3-20-75

ANALYTICAL LABORATORY REPORT

3/27/75

Lab Group Number

311

Project Engineer

HJS

Project Number

H50105

Date Submitted

3/11/75

Sponsor

CLEVELAND CLIFF IRON CO. (sheet 16 of 28) 31

Lab. No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton O <sub>2</sub>		Sp. Gr.		Gas flows											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
1067	X-6	651 - 655		1.23		4.61		—		0.51										
8		650 - 651		1.01		5.04		—		1.75										
9		649 - 650		1.25		5.03		—		1.12										
1070		648 - 649		0.78		5.23		—		1.03										
1		647 - 648		1.23		13.48		0.979		1.27										
2		646 - 647		1.10		13.41		0.970		2.80										
3		645 - 646		1.18		15.41		0.899		1.42										
4		644 - 645		1.18		13.37		0.915		1.25										
5		643 - 644		1.20		14.33		0.879		2.02										
6		642 - 643		1.45		13.75		0.907		2.47										
7		641 - 642		1.24		13.24		0.905		1.23										
8		640 - 641		0.97		13.50		0.910		1.37										
9	Duplicate	640 - 641		0.97		13.24		0.910		1.14										
1080		639 - 640		1.20		13.25		0.911		1.22										
1		638 - 639		1.76		11.72		—		1.29										
2		637 - 638		1.23		10.20		—		1.64										
3		636 - 637		1.77		21.14		0.921		2.41										
4		635 - 636		1.69		27.41		0.918		2.61										
5		634 - 635		0.72		10.06		—		1.22										
6		633 - 634		1.23		9.22		—		1.11										
7		632 - 633		1.48		9.81		—		1.21										
8		631 - 632		1.23		12.55		0.920		1.36										
9		630 - 631		1.23		17.10		0.921		1.85										
1090		629 - 630		1.17		17.10		—		1.13										
1	V	628 - 629		1.35		7.65		—		1.35										

Remarks

Supervisor

*[Signature]*

Date Reported

3-20-75

5C

ANALYTICAL LABORATORY REPORT

3/27/75

Lab Group Number

311

Project Number

H50105

Project Engineer

HJS

Date Submitted

3/11/75

Sponsor

CLEVELAND CITY'S IRON CO

(sheet 17 of 28) 21

Lab No.	Samp No.	Description	621/100 H <sub>2</sub> O		wt/100		Sp. Gr		Grass loss											
			Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find	Est	Find
1092	X-6	627-628		1.27		13.02		0.921		1.69										
3		626-627		1.75		17.21		1.10		1.15										
4		625-626		1.55		7.96		—		1.26										
5	↓	624-625		1.72		5.26		—		1.59										
6	X-9	1037-1038		2.69		5.48		—		0.98										
7		1036-1037		2.94		5.31		—		0.95										
8		1035-1036		3.10		3.11		—		1.50										
9		1034-1035		2.93		4.24		—		0.82										
1100		1033-1034		1.97		3.41		—		0.55										
1		1032-1033		1.95		2.55		—		0.76										
2	Duplicate	1032-1033		1.96		2.77		—		0.58										
3		1032-1032		3.10		3.05		—		1.17										
4		1030-1035		2.95		6.21		—		1.02										
5		1029-1030		2.43		10.34		—		1.55										
6		1028-1029		1.81		4.20		—		1.19										
7		1027-1028		1.96		6.30		—		1.08										
8		1026-1027		1.98		5.07		—		1.12										
9		1025-1026		1.22		3.59		—		0.77										
1110		1024-1025		1.25		5.69		—		1.07										
1		1020-1021		1.70		7.39		—		1.16										
2		1019-1020		2.46		12.30		0.919		1.55										
3		1018-1019		4.64		11.09		0.918		1.15										
4		1017-1018		4.57		27.92		0.917		1.92										
5		1016-1017		3.71		23.73		0.915		1.97										
1116	Y	1015-1016		2.11		9.13		—		1.23										

LD

Remarks

Supervisor

*[Signature]*

Date Reported

3-21-75

Golden, Colorado

## ANALYTICAL LABORATORY REPORT

Lab Group Number

Project Engineer

H. J. S.

Project Number

H 50105

Date Submitted

Sponsor

Cleveland Cliffs Iron Co.

8

Lab No	Samp No.	Description	Gal / 100 lb		Gal / 100 lb		Sp. Gr.		Cust. Vess		% Spent		Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd								
13418	X5	830-831		1.70		25.06		0.99		2.00		82.78								
13417		837-838		1.50		45.97		0.99		2.00		19.11								
13416		838-839		1.20		38.53		0.99		1.50		1.08								
13415		839-840		1.72		37.31		0.99		1.50		73.47								
13414		846-847		1.22		20.45		0.99		1.50		84.23								
13413		847-848		0.19		21.03		0.99		1.50		9.77								
13412		848-849		1.29		20.09		0.99		2.00		85.39								
13411		855-856		1.67		25.01		0.99		5.05		85.70	↑	LD						
13410		856-857		0.77		26.46		0.99		1.00		88.11	↓	JIB						NOTE to maker
13409		856-857		1.21		25.24		0.99		1.00		73.34								
13408		857-858		1.42		23.27		0.99		2.10		78.55								
13407		864-865		0.77		11.22		0.99		1.32		73.79								
13406		865-866		0.76		13.11		0.99		1.35		73.07								
13405		866-867		1.24		16.14		0.99		1.64		71.75								
13404	X-6	651-652		1.24		2.52		—		1.64		84.8								
13403		652-653		1.21		8.03		—		2.00		94.45								
13402		653-654		1.47		4.00		—		2.05		75.71								
13401		663-664		2.22		17.22		0.99		1.75		72.65								
13400		664-665		2.41		15.00		0.99		1.10		74.15								
13399		665-666		2.43		13.22		0.99		1.22		74.10								
13398		665-666		2.50		14.71		0.99		1.11		72.67								
13397		672-673		3.13		28.22		0.99		3.51		71.42								
13396		673-674		—		—		—		1.50		71.42								
13395		674-675		2.00		10.70		0.99		2.00		72.44								
13394		681-682		1.71		—		—		1.00		71.42								

Remarks

Supervisor

Date Received

4-20-75

Golden, Colorado

ANALYTICAL LABORATORY REPORT

4/24/75

Lab Group Number

Project Engineer

HJ

Project Number

H-10105

Date Submitted

Sponsor

Clarks & Clarks, Inc. Co

9

Lab No.	Samp No.	Description	g <sup>al</sup> /ton H <sub>2</sub> O		g <sup>al</sup> /ton oil		Sp. Gr.		Gross loss		% Sent		Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd								
1072	X-6	682-683		1.25		11.82		0.87		1.31		7.62								
1076		683-684		1.23		9.42		0.77		1.32		7.17								
1075		690-691		1.73		21.18		0.73		2.51		52.68								
1074		691-692		1.72		22.13		1.94		2.36		59.04								
1073		692-693		1.4-		26.02		0.922		2.52		26.07	↑	TP						
1075		702-703		1.23		25.21		0.72		1.32		7.17	↓	TP						
1075		703-704		1.23		27.14		0.72		3.15		71.03								
1071		704-705		1.45		20.43		1.02		3.19		84.55								
1072		711-712		0.99		19.72		0.914		1.65		21.41								
1071		712-713		0.98		22.14		0.713		1.91		57.33								
1070		713-714		1.71		35.22		1.71		2.57		83.82								
1069		720-721		1.48		9.24		—		2.27		78.10								
1065		721-722		1.23		13.37		0.913		1.71		22.03								
1067		722-723		0.97		12.22		1.00		1.00		73.53								
533		732-733		1.23		13.37		0.717		1.45		73.11								
532		733-734		1.24		11.22		—		1.25		74.32								
1066		741-742		1.46		7.22		—		1.10		75.51								
1065		742-743		1.76		17.52		0.9		1.50		82.1								
1064	✓	743-744		2.77		7.77		—		1.10		75.1								
1063	X-9	933-934		2.40		41.41		0.76		2.17		41.4								
1062		934-935		2.43		41.42		0.75		2.10		41.4								
1061		935-936		2.41		41.41		0.75		2.10		41.4								
1060		942-943		2.41		41.41		—		1.10		41.4								
1059		943-944		2.41		41.41		—		1.10		41.4								
1058		944-945		2.41		41.41		—		1.10		41.4								

Remarks

Supervisor

Date Reported

4-20-75

ANALYTICAL LABORATORY REPORT

3/31/75

Lab Group Number

374

Project Engineer

HJS

Project Number

H50105

Date Submitted

3-25-75

Sponsor

CLEVELAND Cliffs Iron Co.

(sheet 2 of 6)

Lab. No.	Samp. No.	Description	Gal/Ton H <sub>2</sub> O		Gal/Ton Oil		Sp. Gr.		Gas + Loss											
			Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd	Est	Fnd
2540	X-9	980-985		1.25		10.34		1.98		17.2		13.1								
1		979-980		1.51		12.5		1.98		17.2		13.1		92.70		92.70				
2		978-979		1.23		10.17		1.98		17.2		13.1		92.55						
3		950-951		1.75		24.13		1.98		17.2		13.1								
4		949-950		1.22		12.79		1.98		17.2		13.1		91.20						
5		913-914		1.22		12.79		1.98		17.2		13.1		89.46						
6	X-6	914-720		1.03		15.17		1.98		17.2		13.1								
7		718-719		2.47		35.82		1.98		17.2		13.1								
8		717-718		1.48		28.07		1.98		17.2		13.1		93.68						
9		689-690		1.24		19.73		0.901		1.67		90.78								
2550		688-689		1.96		32.74		0.914		3.44		81.73								
1		687-688		2.07		27.10		0.911		2.55		86.29								
2		662-663		2.22		31.48		0.908		2.67		84.48								
3		661-662		2.93		19.20		0.905		1.90		89.62								
4		660-661		1.33		15.40		0.910		1.25		92.35								
5	X-5	872-873		1.73		7.92		—		0.78		95.47								
6	Duplicate	872-873		1.47		8.29		—		1.04		95.20								
7		871-872		1.60		4.76		—		0.71		96.82								
8		870-871		1.95		7.36		—		1.08		95.31								
9		854-855		1.47		32.24		0.905		2.57		84.03								
2560		853-854		1.47		30.76		0.902		2.45		85.36								
1		852-853		0.98		14.81		0.905		1.83		92.11								
2		827-828		2.07		43.03		0.901		3.23		19.12								
3		826-827		2.07		43.03		0.902		5.57		15.52								
2564	V	825-826		4.59		79.33		0.903		7.13		61.34								

Remarks

Supervisor

*Heiden*

Date Reported

3-28-75

Golden, Colorado

ANALYTICAL LABORATORY REPORT

4/24/75

Project Number 4105  
Sponsor Colorado City of San Co.

Page 115  
Date Submitted 4-3-75

(Sheet 9 of 13)

No.	Samp No.	Description	gal/ton $H_2O$		gal/ton $Li_2$		Sp Gr		Consistency		70 Spent		Est	End	Est	End	Est	End
			Est	End	Est	End	Est	End	Est	End	Est	End						
16	X 4	718-719		1.98		24.71		1.16		1.1		97.80						
17	}	717-718		1.51		13.90		0.919		1.07		92.92						
18		716-717		1.49		5.06		—		0.81		84.7						
19		715-716		1.45		1.25		—		1.07		97.73						
20		714-715		1.50		6.23		—		1.23		95.74						
21		714-715		1.48		7.25		—		1.27		95.6						
22		713-714		1.86		9.46		—		1.64		91.00						
23		712-713		1.59		16.17		0.906		1.39		96.77						
24		711-712		2.26		36.75		0.914		3.56		96.97						
25		710-711		1.49		13.23		0.912		1.48		92.86						
26		709-710		1.74		11.47		0.916		1.33		93.56						
27	708-709		2.08		10.42		—		2.70		94.27							
28	707-708		1.82		10.10		—		1.07		94.33							
29	706-707		1.72		13.18		0.915		1.10		95.14							
30	705-706		1.86		13.00		0.921		1.26		95.77							
31	X II	826-827		1.99		37.46		0.911		2.41		96.53						
31	X 6	734-735		1.22		12.96		0.919		1.65		92.37						